

Educational Supplement

OCTOBER 10 1986 NUMBER 3657

FIRST PUBLISHED 1910 PRICE 55p

We cannot find the answers to all our problems by acquiring knowledge. Some, by their nature – death, for example – are insoluble. But learning nearly always helps a bit, and of the various kinds of learning, the study of history most consistently makes a contribution to clarifying and easing our dilemmas.

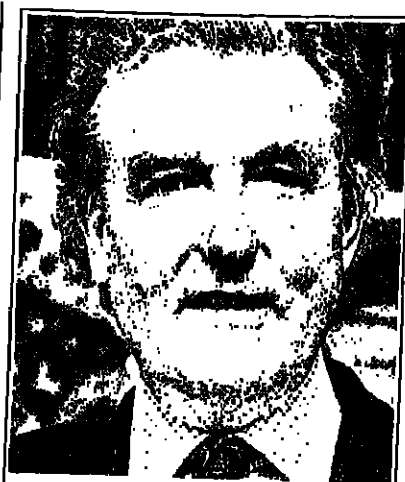
How tragic, then, that less and less history seems to be taught, or at any rate acquired, in our schools. A reader recently told me of the case of an A level history student who had never heard of either our greatest monarch, Edward I, or our greatest republican, Oliver Cromwell.

Such shocking lacunae, now increasingly common, arise not only from the inadequacy of history teaching but perhaps even more from the decline in the habit of reading. In conversation with children and young people I notice that more and more of their knowledge, which in some fields is surprisingly wide, is obtained not from the classroom or from books but from television.

In theory, television is an excellent medium for presenting history. The first time I realized its potential was in 1955, when I watched Malcolm Muggeridge's BBC adaptation of his brilliant book *The Thirties*. I saw then what marvelous opportunities TV offered to the popular historian, and later I made some historical documentaries myself.

But television, I am sorry to say, is also and increasingly used to distort the past and so give viewers, whose own sparse reading habits give them little chance to check what is shown, false knowledge. I was shocked by the recent BBC presentation of the events at the Etaples camp in 1917, which the corporation described as a true story. In fact, some scenes were inventions and the series' own historical adviser indignantly repudiated the portrayal. This seems to me inexcusable behaviour by the BBC, a public-financed body, one of whose objectives is to assist the education process.

However, not all TV history is misleading. On September 14, Channel 4 transmitted the first of a seven-part series, *Pillar of Fire*, dealing with the events leading up to the creation of Israel. It started with the Dreyfus case in 1895, which had a dramatic effect on the views of the effective founder of modern



PAUL JOHNSON

Screen of truth

'Television, I am sorry to say, is increasingly used to distort the past'

Zionism, Theodore Herzl, and goes on to describe the actual achievement of statehood in 1947-48.

This series seems to me TV history as it ought to be. It is by no means an attempt at impersonal, uncommitted and wholly objective history. If such a thing is possible at all, it certainly would not work on TV. A good historian will inevitably have a point of view because he is a moral human being, making judgements which express his beliefs.

In this case the author, Yigal Lössin, is a senior producer at Israel Television, and obviously he has a predetermined viewpoint in the sense that he believes Zionism has a legitimate moral purpose and that the creation of Israel was a justified act.

But none of this means he has been cavalier with the facts, either in selection and presentation, and from what I have seen of it, and to judge by the accompanying book, this is a pretty sober and judicious presentation of a complex and contentious story. All the same, it has aroused a good deal of controversy, notably in Israel itself, where it was originally shown during 1981 in a much longer, 19-hour version. Menachem Begin, the then Prime Minister of Israel, criticized it strongly and there were various impassioned attempts to cancel transmission, through the board of the Israel Broadcasting Authority, through the Government and through the courts. The chairman of the

World Zionist Organization also raised objections.

These criticisms arose partly because Lössin did not sidestep episodes which undoubtedly occurred but which some Israelis think are best forgotten – such as the massacre at the Arab village of Deir Yassin in 1948. There is also the case of the terrorist explosion at the King David Hotel in Jerusalem during 1946, which cost the lives of 91 Britons, Jews and Arabs. This outrage was the work of Menachem Begin's Irgun. When Begin was premier, many years later, and both he and I were speakers in Jerusalem at the opening session of the first conference on international terrorism, I told him I thought it would be inappropriate for him to bring up this incident in his address, let alone try to justify it. But he insisted on doing so, because he believes to this day that it was a blow against a legitimate target – part of the hotel housed the British colonial secretariat and military headquarters – and that adequate warning had been given to the British authorities to evacuate the building.

Lössin's method, in dealing with the King David explosion, is to allow Begin to make this point, and to reinforce it with a statement from Adrian Nisan, who as a schoolgirl was given the awesome task of delivering the deadly warning by telephone. Lössin also films John Shaw, the chief secretary, flatly denying what Begin and

Nisan say, and asserting with total conviction that "no warning was made to any member in the building or reached in any way whatever."

Here is a direct conflict of evidence, a salient point of fact, of the kind which a historian has constantly to deal with. In my view, it is not the purpose of this TV presentation, but lets the antagonists speak and leaves the viewer to judge.

I have recently completed a history of the Jews, which deals with all the events up to the foundation of Israel, and on some points on which my interpretation stress would be different to Lössin's, in general, he seems to have told a fairly and accurately. It is both enlightening and few people, I think, without being moved and sometimes shocked. Thanks to photography and the reel, nearly every episode in the history of modern Zionism has left a film in some sort, so that it is possible to move through the moving image of world.

This ability to use the image in the 20th century a tremendous advantage in historiography, and one which the profession has not yet properly appreciated. As yet, no one has thought seriously of framing rules for presenting history. The rules Lössin follows for himself are sound. But many people in the industry are less scrupulous and are moved towards a code of accuracy.

NEXT WEEK

Baker's treble
Barry Huggill reports from the
Party Conference on Kenneth
Baker's new initiatives for the
Conservative Party

Going up
With the largest-ever batch of
teachers at Scale 2, what are
the prospects for those seeking
promotion and how should they
about it?

Longing for release
Gerald Hargreaves recalls the
miseries of National Service, and
argues its virtues as a social
experience

EXTRA: Mathematics

MPs determined to force vote on sex education amendment

Tory rebels plot to defy Baker plan

by TES reporters

Right-wing Conservative MPs are planning to defy Government whips and force a vote on their amendment to the Education Bill which would give parents the right to withdraw their children from sex education lessons.

The organizer of the rebels, Mr Peter Bruinvels, MP for Leicester East, does not believe that Mr Kenneth Baker's plan to give school governors absolute control over the Conservative Party conference

pages 10 and 11

of sex education will prevent what he believes to be the indoctrination of pupils by left-wing Labour local authorities.

He admits that Mr Baker has "spiked my guns" and that he will no longer be able to rely on the 102 MPs who, before Mr Baker's speech to the Conservative Party conference on Tuesday, had pledged support for the amendment.

But he said that a "random sample" of 15 MPs immediately after Mr Baker's speech had shown 14 still prepared to defy the whips.

Mr Bruinvels' worry is that parents will not be in strength on most school governing bodies until 1988 at the earliest and that until then governing bodies dominated by political

Labour – appointees could continue to "corrupt" children.

He says he would consider dropping his amendment if Mr Baker were prepared to use in sex education lessons that "many people consider grossly offensive."

Meanwhile, there were growing fears in the education world that his other major announcement to the Tory faithful at Bournemouth this week – the establishment of 20 city technology colleges directly funded by the Government – could undermine rival state comprehensive schools.

In a wide-ranging speech to the conference, Mr Baker promised the Tories that control over sex education would be removed from teachers and local authorities – and given to governing bodies which would themselves be answerable to an annual parents' meeting. This new power would be inserted into the Education Bill when it has its last reading in the House of Commons later this month.

He added: "The governing body will decide what, if any, sort of sex education the school should offer and whether the school should allow particular parents to withdraw their children from particular sex education lessons." The Tory rebels had wanted the right to withdraw to be given to all



Big brother: Mr Kenneth Baker, famed for his enthusiasm for high technology, appears on screen at the Conservative Party conference as he delivers his address

parents. Mr Baker went on to say the new city technology colleges would be for 11 to 18-year-olds, government funded but run by educational trusts and catering for between 750 and 1,000 pupils.

He said he expected the first of them to be "open for business" in 1988 – almost certainly after the next general election.

They would be financed by the Department of Education and Science with private commercial sponsors making a substantial contribution towards the costs. They would offer a curriculum with a strong emphasis on technology, science, business studies and design.

It is understood the colleges could be set up without recourse to further legislation by using powers in Section 100 of the 1944 Education Act.

Mr Fred Jarvis, general secretary of the National Union of Teachers, said most governing bodies would recognize that teaching of sex education was sensibly left to the teachers.

Mrs Barbara Bullivant, secretary of the National Association of Governors and Managers, said: "Why can't Mr Baker trust the teachers?"

On technical schools, Mr Giles Radley, Labour's education spokesman, said: "It's another Baker gimmick – it will do nothing to put more books and equipment into our classrooms, repair our schools or improve the quality of teaching. It's a pity that Mr Baker is not more interested in the education of the nation's children than he is in becoming Tory leader."

Mr Demetri Argyropoulos, former chairman of the Conservative National Advisory Committee on education, said: "A scheme for 20 schools is at best a peripheral improvement, at worst marginally harmful."

Local education authorities could find themselves obliged to give schools control over their budgets if the government is re-elected for a third term.

Mr Kenneth Baker is considering legislation to force I.E.S.s to devolve power to schools. But legislation could not be introduced until after the general election he says.

The minister would much prefer that the authorities voluntarily give up their powers and he intends to spend a great deal of time "exhorting" the I.E.s to follow the example set by Cambridgeshire.

But he accepts that some authorities will be less willing than others to hand over control of the purse strings and that a new law may be necessary.

NOTICEBOARD

PEOPLE...

Professor Bertek Saul, vice-chancellor of the University of York to be chairman of the Central Council for Education and Training in Social Work in succession to Ms Joan Cooper. Mr Tony Hall, director of the British Agencies for Adoption and Fostering, to be the new director of GCETS on the retirement of Ms Priscilla Young.

CONFERENCES...

November 6
Play and the outdoors – to explore the role of play in the outdoor environment, natural or built, in children's development for those working with children in the 5-14 age range, either in the statutory or voluntary sector at Josiah Mason Lecture Theatre and Achard Trust Centre, Birmingham, organized by Play Board and the National Association for Outdoor Education. Details from Nick Balfour, Senior Communications Officer, Play Board, Britannia House, 50 Great Charles Street, Birmingham B3 2LP.

November 10
Provision for children with special educational needs: the 1981 Act and its implementation at the Institute of Education, University of London, to report on the DES-funded research programme carried out at the National Association for Education Research, the Huddersfield Polytechnic and Manchester University and at the University of London Institute of Education. Details from Mrs Andrea Deaser.

Project Assistant, The 1981 Act: Policy and Provision for Special Needs Project, Institute of Education, 55 Gordon Square, London WC1H 0NT.

November 11
Experiencing evaluation – a practical approach to evaluation in youth work organized by the National Youth Bureau and the ILEA at County Hall, London SE1 for senior officers and managers in the local authority youth service, voluntary organizations, youth service training agencies and education officers in local authorities. Fee £20. Details from the Director, National Youth Bureau, 17/23 Abchurch Lane, Leicester LE1 6GD.

November 20-21
Pick-up in universities national conference at the Otago Centre, University of Sheffield, organized by the Centre for Continuing Vocational Education. Speakers include Sir Peter Swinnerton-Dyer, George Wren, Professor Graeme Davies, Mr S. Wren, Dr John Padley and Mr Ian Johnston. Details from Mrs Christine Cowan, conference administrator, the University of Sheffield, 85 Wilkin Street, Sheffield S10 2GL.

COURSES...

Urban Community Studies
A series of five courses on the nature and politics of contemporary urban community life. Each lasts for a year and may be studied separately. Starting points depend on previous study. The courses are held in the community, children and ecology.

urban community studies and race community and society. Details from the Department of Extra-Mural Studies, 26 Russell Square, London WC1B 5DQ.

Film and television
Details of the National Film and Television School's short course training programme from October to December are available from Hilary Coote, Administrative Director, National Film and Television School, Beaconsfield Studios, Station Road, Beaconsfield, Bucks HP9 1LG.

EVENTS...

October 21 and November 19
Workplace Nurseries seminars at Fleet Nursery, Wesley House, 4 Wild Court, London from 9pm. October 21 will focus on the practical and campaigning steps to setting up a workplace nursery and November 19 will consider the importance of nursery in a child's development. Details from Penny Crane, Workplace Nurseries, Room 205, Southbank House, Black Prince Road, London SE1 7SL.

GCSE
Cambridge Educational Exhibitions are a series of exhibitions of new books and equipment for GCSE. At the West Midlands College of Higher Education, Walsall (October 23); the Edgar Wood Centre, Manchester Polytechnic (November 12); the School of Education, University of Newcastle (November 12); the School of Education, University of Bradford (November 12); the School of Education, University of Hull (November 12); the School of Education, University of York (November 12). Details from 237 Pentonville Road, London N1 9PL.

George Pearson, Cambridge Educational Exhibitions, Tracey Hall, Cockburn Street, Cambridge CB1 3NB.

October 25-November 29
Open Minds – the process of education, an exhibition of photographs by David Townsend and Mandy Harman at the Impressions Gallery, York. Impressions Gallery of Photography, 17 Colliery Gate, York YO1 2BN.

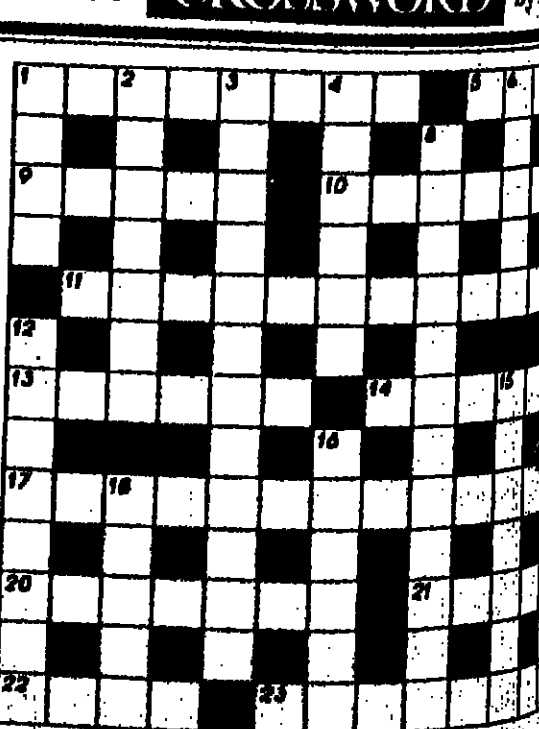
November 10-25
Waterfront schools' exhibition Royal Institute of British Architects exhibition of pupils' work concerning the relationship between water and buildings, at RIBA, 66 Portland Place, London W1.

November 14
Community Service Volunteers' annual review day at Britannia House, Moor Lane, London EC2. The guest speaker will be the Right Reverend David Sheppard, Bishop of Liverpool, on "Living and responding in the city". CSV will give an account of the year's work. Details from Linda Greenberg, CSV, 237 Pentonville Road, London N1 9PL.

PUBLICATIONS...

Children's London
London Visitor and Convention Bureau guide to attractions for children. Traditional events and festivals in London. £1.35 and is available at LYCS Tourist Information Centres or by post from LYCS Sales Department, 26 Grosvenor Gardens, London SW1 2PS.

No 274 CROSSWORD



Across
1. Stand often taken by political speakers (8)
2. A crystal box (4)
3. Ensure how to ensure the shivers (5)
4. Trying to interview royalty? (7)
5. Opposes the mail in capital (5,7)
6. A common dividend being useful to the coal (6)
7. Fancier form of which (8)
8. Indescribable is hardly to be named (6)
9. Thirteen copies of which are held in the British Museum (10)
10. A long line

Down
11. Machine-gun one down (4)
12. Writer is about to approve a column (3,5)
13. Discover with help (4)
14. Lure with a perhaps a's relation (7)
15. Find brilliantly in two languages (5,7)
16. A stock of others (4)
17. Not to change (5)
18. Record the name of a city (5)
19. A common sight

Pay talks' wise men set to step in

by James Melkile

The three wise men who supervised the teachers' pay talks during the summer are set to intervene once more to prevent negotiations getting bogged down.

Sir John Wood, Mr Tony Peers, and Sir Bill Kendall, the independent arbitrator set up by the conciliation service, have taken a back seat since the accord signed at Coventry seemed to herald real progress towards a pay and conditions package.

Internal opposition within some unions, failure to arrange further meetings, allegations that the National Union of Teachers and the Labour Party of the employers are "stitching a deal", and signs of better short-term pay rises being offered to Scottish teachers have changed all that.

The three-man panel is now investigating whether it can clear up some of



Sir John Wood

the difficulties. The unions fear the employers want to force through a final package at a residential meeting in the Midlands next month.

The National Association of Schoolmasters/Union of Women Teachers, which has refused to sign the preliminary

agreements, said: "We don't accept that the agenda for another residential weekend is going to be set up by management, and possibly the NUT, behind the scenes."

Mr Doug McAvoy, deputy general secretary of the NUT, denied any "stitch up". He has also complained about delays, particularly over salary talks. The teachers are worried that there has been little progress in setting up a national steering group to monitor pilot projects on appraisal. The Government is considering applications for money to run experiments.

The National Union of Teachers in Liverpool staged selective strikes in 15 schools this week in protest against the declared intention of the city council to dock money from teachers who refused to cover for absent colleagues. Scotland deal and after – pages 12, 13.

Call for infant teachers

by Julia Hagedorn

Teacher training institutions are to receive a letter from the Department of Education and Science reminding them of the urgent need for more nursery and infant specialists.

Training colleges have already been informed of their increased allocation for primary numbers, following the Secretary of State's announcement last week that primary intake would be increased by 20 per cent by 1989.

Her Majesty's Inspectorate is extremely concerned about the shortage of trained nursery and infant teachers and feels that insufficient time and expertise is being devoted to the needs of the increasing number of four-year-olds in reception classes. Mr Baker is believed to have taken this into account in his deliberations over primary allocations, which were made particularly to improve facilities for children

aged between three and eight. The intake to all initial and postgraduate primary teacher training courses in 1982 was 6,435. The target for 1986 is 9,274 and for 1989, 10,950.

No separate statistics are available to enable comparison between the number of students specializing in nursery and infant teacher training and the number covering the entire primary range.

HMI would like to know what element in courses covering teaching of children aged between three and 11 is devoted to younger pupils. It hopes that, once the institutions are made aware of the problem, they will use their increased provision to concentrate on this end of the primary sector.

NAHT early years' conference – page 5

THIS WEEK

MENT
TORM
MARY
5
5
11
18-19
20-21
22
23-24
25-26
27-28
29-30
31-32
33-34
35-36
37-38
39-40
41-42
43-44
45-46
47-48
49-50
51-52
53-54
55-56
57-58
59-60
61-62
63-64
65-66
67-68
69-70
71-72
73-74
75-76
77-78
79-80
81-82
83-84
85-86
87-88
89-90
91-92
93-94
95-96
97-98
99-100

Empty schools or parent power?

496

Promotion: all you need to know

24 & 25

"Getting some in" Review

26

EXTRA

Mathematics 39-50

Bias by omission?

35

Mr Baker's cuckoos

Secretaries of State, of either party, like to have some lollipops for their party conferences - newsworthy announcements with which to spice the pabulum of flattery and abuse which normally serves to keep the tone down to the level the faithful expect on these occasions. This year was no exception. Mr Baker had two bits of news. Sex education is to be remitted to school governors by another amendment to the 1986 Education Bill, thereby removing it from the control of the I.C.S. and limiting teachers' discretion.

This looks like quite a good wheeze as a pragmatic response to the legalism of their lordships and the apparently fathomless idiocy of some local authorities. But exactly what will these new responsibilities involve? Can governors really perform them in the circumstances of stress which may arise? There is no formula which can be imposed from the centre which can prescribe exactly what should be taught or the context in

which it should be taught. That's why you need professional teachers. Giving responsibility to the governors will not solve every potential difficulty but it should enable most - but by no means all - schools to get on with their work without interference.

The second lollipop was the big one - the 20 or so "city technology colleges" (another ghastly noun-adjective to offend Mr Baker's concern for the English language). The projected opening date is 1988 so these are post-election institutions, though the planning will go forward in anticipation of a Conservative victory.

The educational establishment will hate this idea as it hated the Assisted Places Scheme, only more so. At a time when falling rolls are hitting city comprehensive schools hardest, 20 new, large, well-funded selective schools will open in direct competition.

There is no way that this can happen in

London, Sheffield or Manchester, or wherever, without the schools in the catchment area of the new CTCs being affected. Only a blinkered, free-market ideologue could believe that the effect will be healthy competition.

The CTCs are to be selective, but not simple "academically" selective on the model of the old 11-plus. Selection methods are likely to put a premium on pupil-motivation and parental support, ensuring for the CTCs all the necessary ingredients for spectacular success.

What the educational establishment has to acknowledge is that these will be extremely popular: the public will esteem them highly. It will only confirm the public in that view if these schools come under constant fire from the maintained sector. They will be popular because they will (within their limits) be very good schools and very good value for money. Of course, anyone can run a good school with the best-

motivated, best-supported pupils in the rest of the maintained system, which have been made less favourable cases much less favourable.

The most significant Tory remark, which came when he emphasized that the CTCs will not be "part of the local education authority's long-term implications are clear: the local education authority is a line of development confined by continues. He made this clear in a speech, indicating a progression through the decentralization of power and parents, with more control of school level - all necessary pre-ultimate privatization. There was about the importance of education the next general election.

COMMENT

... flooding in the Main

There was a moment shortly before Christmas 1985 when it looked as if there might have been an independent inquiry into teachers' salaries in England and Wales. The move was resisted inside the Government, reputedly by the Treasury, which preferred to see what would emerge from attempts to involve the local authorities and the teachers' unions in new negotiations. North of the Border, however, the Secretary of State for Scotland did agree to set up such a committee of inquiry, thereby giving in to the Educational Institute of Scotland's principal demand, and bringing the Main Committee into being.

In the event, the Acas talks prospered and the process began which eventually led to the Heads of Agreement signed (or not signed) at Coventry. But as a result of the Treasury's caution (or natural parsimony), a potentially dangerous situation was bound to arise: two separate mechanisms had been devised to deal with two linked disputes - linked, that is, in the sense that the Government would sooner or later have to show its willingness to deal in an even-handed manner with teachers in the whole of Great Britain. As soon as the Coventry "deal" had been pulled off, speculation began about the Main Committee and its report. Last week speculation gave way to direct comparisons and the game of leap frog began.

As the reports on pages 12 and 13 show, the two sets of proposals are different in form and exact comparisons of the complete packages are difficult to make. The teachers' unions naturally will all be under pressure to try to get the best of both worlds - unpacking the two deals and cannibalizing them to find the most desirable elements of each. Mr Doug McAvoy, the deputy secretary of the National Union of Teachers, has made a start by noting that the Scots get their pay rises more quickly and without some of the disliked features of the Coventry plan for the integration of scales in a Main Professional Grade. He is, therefore, pressing for the procedure for assimilation to be speeded up on Scottish lines.

His zeal for a Scots-type deal, however, falls short of asking for the top of the MPO to be lowered to the £12,900 which will be the summit of the basic scale for all unappointed teachers in Scotland. The Main report has put more of the money into the superstructure of posts in the hierarchy - to



Kenneth Baker and Scottish Secretary Malcolm Rifkind: will they want similar deals?



Malcolm Rifkind: will they want similar deals?

stretch differentials again after the contraction experienced during the 1970s - which would seem likely to appeal to the Department of Education and Science more than the approach adopted at Coventry.

What is quite clear is that the Scots proposals, like the English and Welsh, leave wide open many of the contract issues - and while implying more generous staffing at various levels, fail to account for their costs. Even so, the Scots pay rise is priced at 16.4 per cent between now and March 31, 1988, for some senior teachers and up to 12-15 per cent "over the next few years as... (they)... advance to the new grade of senior teacher."

Having set up the Main Committee and chosen its members, the Government is under considerable pressure to accept its arithmetic. The Main Report must now be thought of as helping to mark out the pitch on which the English and Welsh teachers will conduct their contest with Mr Kenneth Baker, the Secretary of State, and on which he will tackle them and the local authorities. Of course, the Scottish teachers may not play ball, though John Pollock, the general secretary of the EIS, has been wisely cautious in his comments. The EIS demanded an inquiry. It got what it asked for. It will now find it difficult to reject the result and regain any public sympathy.

If the Government accepts the Main Report and agrees to fund its share of the cost, will ministers try to make any deal for England and Wales conditional on a similar set of differentials? This must be the temptation, and - while many believe this would, in fact, be a desirable aim - it would be the whole of this Coventry deal in jeopardy. That is the trouble with package deals: if one part collapses, the rest follows.

But the Government, having been forced on to the sidelines by the unexpected success of Acas, is certainly not going to step up for a salary

structure which it distrusts and dislikes. It has been able to postpone judgement on Coventry until a balanced pay-and-conditions proposal is on the table. The Main Report may change all that and cause ministers to tip their hand. If they do, it may well cause even more anguish for the teachers and the local authorities which are struggling to bring the schools back from the brink.

Selective truth

The political motive underlying Mr Kenneth Baker's outburst over ILEA's book-buying policies (page 3) should not be allowed to obscure the seriousness of the situation which now appears to have arisen.

Mr John Carr, the local politician who oversees the authority's buying policy, has declared that materials which don't project "accurate" and "positive" images of blacks, women and disabled people will not be bought.

In his recent speech to the British Educational Equipment Association, Mr Carr made great play with the word "accuracy", but it is clear that that yardstick is to be applied in a selective manner. It is hard to imagine Mr Carr and his colleagues acquiescing willingly in the purchase of books whose portrayal of civil rights in present-day Central Africa was accurate, as Mr Carr says it, the word was inevitably a cosmetic overtone.

"Thought control" may be a little exaggerated, but "indirection" is exact as a description for the predominant Left-wing, socialist, ILEA's "equal opportunities" policy-makers' permanent state rather than policy.

cians, on the whole - may not rival the antics of Brent, but their political bias regularly slants booklists and judgments to the point where they insult their audience's intelligence. The notorious Auschwitz pack which is currently under revision (page 34) is not the worst example of the trend, but there history was distorted through what looks like systematic omission.

We have argued before on this page that it is a misleading and unhelpful simplification to lump "anti-racism" and "anti-sexism" together as a single evil which can be eradicated by a concerted Socialist effort (and to throw in the disabled as an additional element in the crusade is both insulting and plain potty). But much of the trouble lies in the fact that the anti-racists are living in the past.

They biblically castigate "Eurocentric" and "neo-colonialist" books as though publishing has stood still since the fifties: they should visit a bookshop or two. But they, of course, have their own "black" bookshops (which teachers of the ILEA pamphlet *Positive Books on Black People's History* are instructed to visit "as a matter of course"). Social ghettos breed underclasses: literary ghettos breed lies.

Mr Carr and his friends are putting sane and important policies at risk.

tion that central and local authorities between them would be million this year on provision allowed for teachers as well as books and assumed that the LEAs would be doing their best to begin the year.

But it has to be remembered that it was not a national policy support grant, that the books were doing their best to begin the year.

Mr Carr insists that the Education Publishers' Association has a similar policy to ILEA on this issue and that Mr Baker's comments were "transparently cheap publicity linked to the party conference."

ILEA's anti-racist, anti-sexist book buying policy is based on a new pamphlet called *Positive Books on Black People's History*. Its foreword states: "The authority's initiatives on race, sex and class require schools to evaluate the books, materials and resources that are available in their institutions and to ensure that what is in use is not racist or sexist." It also encourages schools to "visit black bookshops as a matter of course" when buying its "positive resources".

The growing part of the school's strength the Government, is also a first-hand of the school's James Hammond remarks.

4. The truth is that the national GCSE specification is too complicated to be taught by headteachers' sketchy and exam does provide a very peg on which to hang an overall lack of resources.

The only snag is that it also given Kenneth Baker's testimony in his Birmingham offshoot much of the blame for resourcing in general on the school's side of the fence.

The advertisement also calls for "a thorough grasp of how the curriculum and institutional structures (both teaching and non-teaching) perpetuate racism and other forms of discrimination."

It does not ask for experience of teaching or of education administration.

Mr Poole said he fully supported the advertisement's emphasis on equal opportunity policies, but added: "I am desperately need someone in management who can work with teachers and stand up to the

Mr Kenneth Baker, who was at the conference, was shocked by Mr Carr's speech and said that ILEA's approach "is very close to imposing thought control in London schools." However, Mr Carr insists that the Education Publishers' Association has a similar policy to ILEA on this issue and that Mr Baker's comments were "transparently cheap publicity linked to the party conference."

ILEA's anti-racist, anti-sexist book buying policy is based on a new pamphlet called *Positive Books on Black People's History*. Its foreword states: "The authority's initiatives on race, sex and class require schools to evaluate the books, materials and resources that are available in their institutions and to ensure that what is in use is not racist or sexist." It also encourages schools to "visit black bookshops as a matter of course" when buying its "positive resources".

Most polytechnics and major colleges will have licences to start their own courses, check their quality and award degrees, under proposals published today by the Council for National Academic Awards.

In return, institutions will be subject to more stringent controls on external examiners and a review every five to seven years.

The growing part of the school's strength the Government, is also a first-hand of the school's James Hammond remarks.

4. The truth is that the national GCSE specification is too complicated to be taught by headteachers' sketchy and exam does provide a very peg on which to hang an overall lack of resources.

The only snag is that it also given Kenneth Baker's testimony in his Birmingham offshoot much of the blame for resourcing in general on the school's side of the fence.

The advertisement also calls for "a thorough grasp of how the curriculum and institutional structures (both teaching and non-teaching) perpetuate racism and other forms of discrimination."

It does not ask for experience of teaching or of education administration.

Mr Poole said he fully supported the advertisement's emphasis on equal opportunity policies, but added: "I am desperately need someone in management who can work with teachers and stand up to the

ILEA 'close to thought control' - minister

A fresh controversy arose this week between the Secretary of State for Education, and the Labour-led Inner London Education Authority over the books it provides for schools.

The dispute was sparked off by a speech entitled *The Product Needs of ILEA's Multi-ethnic Policy* given by Mr John Carr, chairman of the authority's trading supplies committee, at a recent British Educational Equipment Association conference.

"We are not interested in buying from anybody books, videos, slides, tapes or materials of any kind which carry outdated images, outdated messages about women, about ethnic minorities or about disabled people," said Mr Carr.

He went on to say that if such material was not "accurate" ILEA would be advised by a "specialist" team in the Inspectorate, to censor it. "You are smart people, or at least if you're not you won't stay in business for very long," he told the book suppliers. "You know that if you want to develop a new product you've got to find out what it is that is going on in the market."

Mr Kenneth Baker, who was at the conference, was shocked by Mr Carr's speech and said that ILEA's approach "is very close to imposing thought control in London schools." However, Mr Carr insists that the Education Publishers' Association has a similar policy to ILEA on this issue and that Mr Baker's comments were "transparently cheap publicity linked to the party conference."

ILEA's anti-racist, anti-sexist book buying policy is based on a new pamphlet called *Positive Books on Black People's History*. Its foreword states: "The authority's initiatives on race, sex and class require schools to evaluate the books, materials and resources that are available in their institutions and to ensure that what is in use is not racist or sexist." It also encourages schools to "visit black bookshops as a matter of course" when buying its "positive resources".

Most polytechnics and major colleges will have licences to start their own courses, check their quality and award degrees, under proposals published today by the Council for National Academic Awards.

In return, institutions will be subject to more stringent controls on external examiners and a review every five to seven years.

The growing part of the school's strength the Government, is also a first-hand of the school's James Hammond remarks.

4. The truth is that the national GCSE specification is too complicated to be taught by headteachers' sketchy and exam does provide a very peg on which to hang an overall lack of resources.

The only snag is that it also given Kenneth Baker's testimony in his Birmingham offshoot much of the blame for resourcing in general on the school's side of the fence.

The advertisement also calls for "a thorough grasp of how the curriculum and institutional structures (both teaching and non-teaching) perpetuate racism and other forms of discrimination."

It does not ask for experience of teaching or of education administration.

Mr Poole said he fully supported the advertisement's emphasis on equal opportunity policies, but added: "I am desperately need someone in management who can work with teachers and stand up to the



Feel first: Headmaster Roger Coles leads pupils from Oxted County School in the first leg of a 10-mile sponsored walk. The whole school, including staff, was involved in the walk, which aimed to raise £8,500 for a new minibus.

CEO calls for link-up of HMI and auditors

by Sue Surkes

Her Majesty's Inspectors and the Audit Commission could eventually be replaced by a single body as the link between spending and educational performance grows, Mr Donald Naismith, Croydon's controversial director of education, said this week.

Addressing HMIs at a London conference on efficiency measurement, he said the new body would be responsible for assessing how successfully chief education officers converted resources into educational achievement.

He said CEOs had to link resource management with curricular opportunities and standards - a task made difficult, if not impossible, by a divided system, which made local government

responsible for the former and schools for the latter.

Local authority finance was still run along traditional lines. Education committee estimates failed to link spending to educational programmes that related resources to performance.

The chief education officer provided the link between the two sides of the educational equation - input and output. However, the future role of HMI and the Audit Commission was less clear, Mr Naismith said. The introduction of ideas about absolute standards and measurement techniques would lead quality control to become largely self-regulating.

A report setting out options for the introduction of comprehensive schools in the London borough of Sutton - one of the last remaining bastions of grammar school education - has been received by local councillors.

The report, by the director of education, Mr Charles Melville, sets September 1989 as the date for replacing grammar and secondary modern schools.

Reorganisation proposals were drawn up at the request of the ruling Liberal group, which took over from Conservatives in the May elections.

The report sets out the alternatives: 11-18 schools, with between four and six-form entry with a cost put at £6.68 million, or 11-16 schools with other a central sixth-form or tertiary college at a cost of £4.99 million excluding 16-19 provision.

The report is due to be discussed at a special education meeting on October 17.

Mr Kenneth Baker referred this week to a school in Brixton which had a truancy rate of up to 50 per cent. Hilary Tagg looks at the HMI report he was quoting.

Fifth-formers' attendance rate drops to 55%

Attendance levels at Stockwell Park school in Lambeth dropped as low as 55 per cent in the fifth form last year, says an HMI report just published.

The report states that: "The range for fifth-year attendance is 46 per cent for one class, up to 79 per cent for another."

Stockwell Park, which opened in 1983 following the amalgamation of three schools, has a high proportion - 60 per cent - of pupils from ethnic minorities and 25 per cent of its pupils do not speak English as their first language at home. Nevertheless, the pupil/teacher ratio is good, standing at just over 8:1, and, according to the report, the school enjoys "ample resources both human and material."

Low attendance levels do, however, cause great concern, it adds. Any kind of continuity in teaching is extremely difficult, and examination results are correspondingly low.

In 1984 the O level pass rate was 39.1 per cent and had dropped a further 3 per cent last year. Over 20 per cent of CSE papers were ungraded in the same year. A level results were more encouraging, achieving a 50 per cent pass rate in 1985, but only 15 pupils were entered.

The means to improve the situation

already exist, says the report. The pastoral care is for example, extensive, including regular visits from an educational psychologist and psychiatrist.

The inspectors say that the "adverse publicity experienced by the school has resulted in a vigorous campaign to project a more positive image." They add that they recognize the progress made in the two years since the amalgamation, and are reassured that the great majority of teachers are willing to face the problems caused by the action over pay.

Many problems still remain, however, says the report. It states that "currently 31 pupils on the school roll are educated elsewhere at off-site centres or through home tuition."

Moreover, as children are not allowed on school premises during lunch breaks there is no alternative social base for pupils and the incentive not to return is consequently high.

The report on Stockwell Park suggests that providing children with a motive to attend school more regularly.

Mrs Sylvia Keefe, head of Stockwell Park, said tremendous effort had been made to improve attendance at the school since the HMI's visit. Average attendance for the first four weeks this year was over 80 per cent.

WHY HAS AMMA GROWN — FROM 75,000 TO — 115,000 MEMBERS IN THE LAST 8 YEARS?

AMMA IS THE UNION

- 1 which represents classroom teachers and classroom teachers alone.
- 2 whose policies are never imposed by a small, over-powerful Executive.
- 3 which strikes the balance between protecting members' interests and acting professionally.
- 4 which treats members as individuals with minds of their own.

If you want to know more about AMMA, see your School or College Representative, or write to us at



Assistant Masters and Mistresses Association
7 Northumberland Street, London WC2N 5DA

JOIN BEFORE 5 DECEMBER
pay only our 1986 subscription rate but
cover membership right to the end of 1987

Haringey to make 'anti-heterosexist' lesson guidelines

by Jeremy Sutcliffe

A curriculum working party has been set up by Haringey education authority to establish guidelines for teaching "anti-heterosexist approaches" in schools.

Councillors also decided at an education committee meeting last week to set up a "consultation forum" to take in views from the London borough's parents, teachers, and gay community.

The committee agreed the measures after receiving a report on the teaching of "positive images" of homosexuals, in line with an election pledge made by the ruling Labour group in May.

The meeting was lobbied by parents, who are campaigning against the implementation of the commitment, and by rival groups who are supporting the council. There were several angry exchanges and scuffles outside the council chamber before the meeting, and later in the public gallery.

Mrs Audrey O'Dell, chairman of the Tottenham Parents Group and secretary of the Haringey Parent Teachers' Association, condemned the decision to set up the working party, and said parents were sceptical that the forum would represent the views of ordinary parents.

"I think this should be put out to public consultation," she said.

About a dozen church leaders from Haringey handed in a letter, protesting against the plan. Mr Tony Mason, the minister of the Muswell Hill Baptist Church, who organized the protest, said the plan would present homosexuality as acceptable and normal - which was against Christian teaching.

"In giving positive images of gays to school children, there is a danger of encouraging children who go through a homosexual phase to become permanently homosexual."

Opposition to the plan has been joined by a Labour education committee member, Mrs Eileen Garwood. She is a former chairman of the schools sub-committee and a member of several Haringey governing bodies.

She said: "I am totally against including this in the curriculum. If two consenting adults want to go off together I do not object. I do not believe that any homosexual should be denied a job provided they have a qualification."

But I think that before it is included in the curriculum it needs to be looked at very carefully," she said.

National Union of Teachers' members in Haringey have expressed support for the council's "positive images" teaching policy, but heads and teachers of other unions have expressed doubts about its practicality.

It is still not clear what form "anti-heterosexist" teaching would take if the council decided to go ahead with the plan. But a document on the subject drawn up by the women's group of Haringey Labour Party may give a clue.

This says: "Heterosexuality is not biologically built into us like hunger - we are not all born heterosexual. We are all born with a sexuality. That most people express their sexuality heterosexually rather than homosexually is because we are socially conditioned to do so."



Taking issue: activists tussle at Haringey civic centre

Left accused of gay bias

by Barry Hugill

Public funds are used by left-wing local authorities to promote homosexuality among children and young people, according to a booklet published this week.

In *Gay Lessons*, Miss Rachel Tingle, a former researcher for Mr David Howell, the Conservative MP for Guildford, claims that the offenders are the Inner London Education Authority, Manchester and Liverpool.

Miss Tingle warns: "It is to be expected that a greater emphasis on homosexuality in sex education may result in more practising homosexuals."

She accuses the National Union of Teachers, the National Association of Teachers in Higher and Further Education and the National Youth Bureau of participating in a campaign to promote homosexuality.

A large part of the booklet is devoted to an attack on the ILEA, where "pressure groups have initiated policies against 'heterosexism' which are being zealously put into practice."

Miss Tingle says that the teaching materials promoted by some local authorities "do not show the other side of the gay picture."

Pupils should know about the "extraordinarily high rates of promiscuity among male homosexuals, the possibility of contracting AIDS and so on," she says.

She singles out for criticism a video listed in the ILEA *Anti-sexist Resources Guide* called *Franked Youth: Revenge of the Teenage Perverts*.

It is "a clever and persuasive video designed to make 'straight society' look aggressive and hard," she says.

Head's future in the balance

by Julia Hagedorn

The head at the centre of a row over his school's teaching styles is awaiting the outcome of an inquiry which could recommend his dismissal.

Mr Brian Dugan, 41, has been head of St Jude's Church of England primary school in Southwark, London, for the past six years.

Supporters say Mr Dugan has turned it from a run-down inner-city primary on the brink of closure to a highly successful establishment where nine children have won scholarships to public schools and there are now three children waiting for every spare place.

But a confidential report by a team of Inner London Education Authority inspectors written after an initial visit in 1983 expressed serious concern.

Among the criticisms were that: children with special needs were ignored - including one with writing and concentration problems who

was left at the back of a class;

Mr Dugan had lost the support and loyalty of his staff;

He taught a select group of children while leaving others to their own devices;

His style of leadership, absence of policy and unsatisfactory pattern of organization had disrupted the school.

One entire year of records for one class was apparently missing.

The inspectors paid a return visit last year when they found that Mr Dugan had ignored their advice on changes.

Under the constitution of a voluntary-aided school, the head is employed by the governing body. They asked Southwark diocesan board to hold an inquiry into the allegations. Meanwhile, under chairman's action, Mr Dugan was suspended 10 days before the end of last term.

At a full meeting of the governing

body two weeks ago, Mr Dugan was reinstated pending the tribunal's findings. It is understood that there is a balance of those for and against Mr Dugan on the governing body.

He has not been back to his school since his reinstatement and is rumoured to be thinking of returning to his native Australia.

The tribunal finished taking evidence on September 24 and its recommendations will be made in two or three weeks to the governing body. If it recommends dismissal, this decision would have to be ratified by the ILEA.

In this speech to the Conservative Party conference on Tuesday, Mr Kenneth Baker referred to the case, saying: "In Labour ILEA, a head teacher has been suspended because he taught his children to strive for academic excellence, to win scholarships, and to play cricket."

Exam monitor by DES

by Sue Surber

The Department of Education and Science is expected to set up an authority financing of a Certificate of Secondary Education (CSE) in 1987.

The move follows a meeting between Mrs Angela Rumbold, Minister of State, and the National Union of Teachers (NUT).

The NUT presented a document showing that local authorities providing "well under half" of the £15 million the Government would spend on the scheme.

The union arrived at the meeting by taking the amount allocated to each authority and out the percentage each would contribute to the £15 million in books and equipment.

By applying these percentages to £10 million, it was able to produce a national figure that each local authority would be approaching.

It found that out of 41 local authorities, 10 had not put forward a bid, 16 had put forward less than 15 per cent, including Kent and Wiltshire put forward less than 10 per cent.

Those local authorities were the London boroughs of Brent and Kingston-upon-Thames, the NUT, described the move as "a serious setback".

Mr David Hart, general secretary of the NUT, said: "The NUT is disappointed that the Government is not monitoring the implementation of the CSE, which is its resourcing time."

The NUT survey was the Education Secretary's July that £70 million would be allocated to the CSE this year.

The survey results have been accepted. A spokesman for the DES said the ruling group allocated any extra funds to this year because they had not enough money to qualify for

ment assistance, had been taken by five per cent and were substantial amounts in response facilities.

Mr Peter Daly, NUT director for schools, said the DES had capitulated by 15 per cent was matching the amount through the DES and NUT. He is interested to know where their figures from," he added.

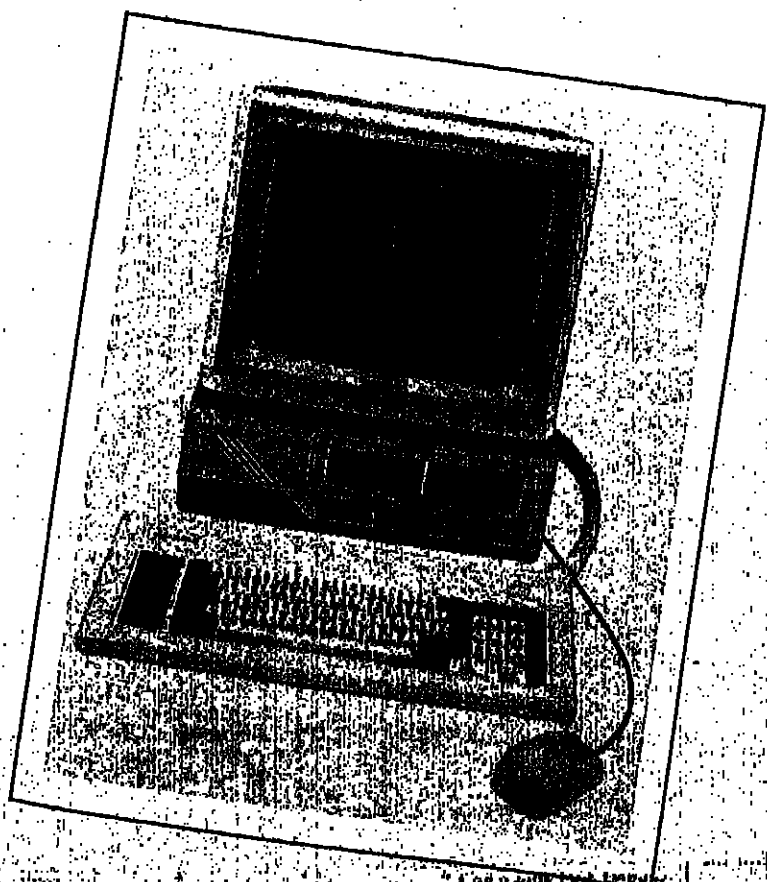
Mr Peter Coles, NUT education officer, feared the DES would ignore a last-minute DES increase funds. The DES had allocated £12 million more than the DES had asked for.

Meanwhile, the Education Secretary has asked the Secondary Education Council to ensure rapid implementation of simple GCSE grade so that trial examinations can be held in some subjects in the summer of 1989.



Hands up all those who'd rather network on the Nimbus.

- Easy to use and manage with friendly menu systems.
- Outstanding network at affordable prices.
- Proven today to run tomorrow's networks.
- Supplied with complete library of educational and commercial software.



Research Machines have 5 years' experience of making quality networks for schools and colleges, with over 2,000 systems up and running.

Today, the Nimbus Network brings fast processing, brilliant graphics and major software such as Windows, BBC Basic, RM Logo, AutoCAD, Lotus 1-2-3 and administrative software within the educational budget.

What's more, each Network comes with FREE training and technical support, and a wide range of educational and professional software (worth over £5,000).

And now, RM Net 2.

Now the Nimbus network is driven by advanced new software—RM Net 2—putting it even further ahead in terms of educational value. It's twice as fast, easier to run—with simple access and supervision through the friendly, protective menu system—and allows more power to more users.

For more information, send us the coupon and we'll put the facts at your fingertips.

Please send me more details about the RM Nimbus with Net 2. Research Machines, Mill Street, Oxford, OX2 0BW. Tel: 0865-249866.

NAME

POSITION

ESTABLISHMENT

SECTOR: Primary / Secondary / Further / Higher / Other (Please complete)

ADDRESS

POST CODE

TEL

RM NIMBUS

BUILT-IN NETWORKING • BUILT-IN SUPPORT • BUILT-IN BRITAIN

THE YOUNGSONG MUSICALS

SECONDARY AND MIDDLE
"In Great Grandmother's Day"
Drama of 10-14 English children who went on strike for their teachers. Chris Adams' moving new musical. 2 hrs. Rm £10.95

"The Factory Children"
Poor mother in the East End. 1930s. Performed all over the UK. 80 mins. £10.15

"The Evacuées"
City kids sent to the country in war-torn 1940. A bit of school show. 75 mins. Rm £10.15

PRIMARY AND MIDDLE
Join The Queue
High Space Comedy with a difference! 5 Adams & Sullivan hit songs. 35 mins. Rm £7.95

"Dream Maker"
Dreadful adventures by BBC award winner Michael Friswell. 45 mins. Rm £9.95

"The Minstrel Show"
Great legend retold in singing songs. Theatrical. 45 mins. Rm £9.95

"The Lollipop Lady"
For children and adults. The Primary School. 45 mins. Rm £9.95

Youngsong Music
Tel: (01) 546 0288
M.P.O. BOX 317 Kingston, Ry. KT2 8PT

Schools Away

for the best Value in Educational Trips.
All visits, worksheets and insurance included.

SCHOOLS AWAY
FREEPOST
LONDON
SE27 9BP
or Tel. 01-870 4177
for brochure.

UCCAPLAN '87
Comprehensive BBC micro database on Universities & degree courses in UK.

Tel. 0793 826699
TSL Ltd. BOX 25, PAVYHAM, KENT

Labour borough urged to end job advert ban

by James Meikle

The London borough of Hounslow is being urged to lift its ban on advertising jobs in *The TES* following a big fall in the number of teachers seeking posts in local schools.

Advertisements for two headships of infant schools have brought just one applicant each - the same teacher - instead of the 12 to 15 normal for such posts.

Only four or five candidates, almost all from within the borough, are seeking deputy headships of primary schools. Twenty applications would be more usual.

The second master or mistress job at a secondary school has attracted 10 applicants, rather than the 50 anticipated. The borough is to do with the

SDP supports independents

The future of Britain's independent schools would be safe with the Social Democratic Party, a prospective parliamentary candidate said last weekend.

Mr Mike Bruce, who is set to contest Dartford, Kent, and is a member of the SDP's higher education working party, told Assistant Masters and Mistresses Association representatives at the annual independent schools conference in London that the state system needed a healthy challenge and stimulus.

"The independent schools are safe with us," he said.

Mr Bruce attracted opposition from his audience when he attacked the assisted places scheme for creating the most able pupils. He said: "Schools of any kind are at their most effective when they contain the full ability range."

It is a view on the state schools to which many would agree.

Librarians' resource plan

Librarians say the Government's new school and college service will be the GCSE's success.

A Library Association party claims that teacher training book providers have been a priority for the new year.

But to support the new GCSE properly, additional resources would be required for extra in-service training and information - and in some cases, computer port.

The working party of the Association of Librarians in Schools and Colleges has been set up to coordinate the need using the state schools to

Secretary of State outlines plans for new technology colleges and foresees a shift in school power

Baker's course to put governors at the helm

Parent and governor power was the theme of Mr Kenneth Baker's speech to the Conservative Party conference on Tuesday afternoon.

In future the governors alone will decide what, if any, sex education a school should offer.

And it will be up to the governors to decide whether the school should allow particular parents to withdraw their children from sex education lessons.

A network of 20 city technology colleges (CTCs), funded by the Government, business and industry, will be introduced by the Conservatives if they secure a third term of office.

The CTCs, the first of which will open in 1988, will offer hope to young people and their parents, said Mr Baker. The inner-city schools will be

non-selective and cater for boys and girls, not necessarily of great academic ability but with a desire to learn. They will not be grammar schools and will not, Mr Baker stressed, be a step back to the 11-plus.

The Secretary of State was loudly cheered when he announced that they would be independent schools although pupils would not pay fees. They will be totally free of I.e.a. control and influence. They will offer a curriculum with a strong emphasis on technological, scientific and practical work, business studies and design.

The key to a successful school is the head, said Mr Baker. For that reason he is determined that in future more power should go to heads and to governors, including greater control over budgets.



The following is taken from his address:

"While socialists see education as a means of social engineering, we see education as a springboard for individualism, opportunity and liberty. By creating opportunities for the child it confers freedom of choice and action for the young adult. For us, education must fulfil the individual's potential, not stifle it in the name of egalitarianism."

"Education can no longer be led by the producers - by the academic theorists, the administrators or even the teachers' unions. Education must be shaped by the users - by what is good for the individual child and what hopes are held by their parents."

"Many people have no idea how decentralized is our system of education. I get just as frustrated as parents when I read that this or that school is short of textbooks, or needs a coat of paint. And the reason I get so frustrated is because it is the local authority, not the Secretary of State, who decides whether money will or won't be made available for those books or for that paint. My privilege is largely restricted to picking up the bills which other people run up."

"It is crucial for parents to understand where power in the education system lies rather than go on believing that it only the Education Secretary waved a wand then all would be well."

"Our Education Bill radically changes the composition of school governing bodies. It gives these bodies new powers and responsibilities. We will end the dominance of the local authority and its political appointees. It will no longer be possible for local authorities to foist a headteacher on a school against the wishes of the governors."

There will be more parent government elected by all the parents. But now it's up to you, your friends and neighbours to respond by coming forward as governors to assume greater responsibility."

"Our Education Bill also lays down that sex education should be set in a moral framework which emphasizes loving relationships and the value of family life."

"Our schools offer sex education because that is part of their job in helping children to become responsible adults. To allow parents an absolute right to withdraw their children from sex education would be a bad precedent and difficult to administer. But I recognize that parents are rightly concerned when sex education uses unsuitable books and methods."

"So I intend to strengthen the safeguards in the Education Bill. Control over sex education will be removed from teachers and local authorities and given to the new-style governing bodies which will have more parents on them and be answerable to an annual parents' meeting. The governing body will decide what, if any, sort of sex education the school should offer, and whether the school should allow particular parents to withdraw their children from particular sex education lessons."

"The teachers' pay dispute is still not

... parents are rightly concerned when sex education uses unsuitable books'

resolved. The Government's position is clear. We believe good teachers should be better paid. We believe parents and pupils are entitled to high quality and uninterrupted education."

"That is why we want to see a contract setting out the obligations of the teachers, agreement on the cover and more rewards for good performance. So this issue is not just about pay - it's about performance as well. I fully recognize there are many good teachers, dedicated and devoted to their profession. That is why we are ready to help finance a pay deal that will secure these aims, within what the country can afford."

"If there is a good headmaster or a good headmistress then the school will be good. That is why I want to see more power given to the headteachers. I want to see them together with their governing bodies controlling more of the money spent in their schools."

"I want to see headteachers win back the standing and place they had in society 50 years ago. They are special

people, they are leaders, they have a unique position to influence the lives of generations of young people. Thankfully we have many thousands of very good ones."

"Just reflect for a moment what would happen to education under Labour. Last week in Labour Brent a Conservative councillor, when an interview with a black candidate was running two hours late, looked at her watch and shuffled her papers. She was accused of 'racist body-language'. In Labour ILEA a headteacher has been suspended because he taught his children to strive for academic excellence, to win scholarships, and to play cricket. In Labour Haringey the socialist chairman of a governing body was reported as saying he would not offer a teaching job to a Christian."

"This is the sort of pressure that parents, governors, teachers and Conservative councillors have to face all the time. It's nothing to do with education. It is bigotry masquerading as equality, and intolerance masquerading as freedom. This is not a tiny minority of fanatics and cranks. It is Mr Kinnock's supporters applying Labour education policy."

"At their Blackpool conference last week the Labour Party voted to end all independent schools, abolish all sixth forms, and scrap exams. They are the great destroyers. The future of our children is not safe in their hands. Where Labour is in power it isn't sweet-smelling roses. To paraphrase Shakespeare: 'Roses that fester smell far worse than weeds'."

"Our Conservative approach is different. Quality is at the top of our list. We must level up the standards. We must broaden opportunity. We must give confidence to our young people to make their own way through life."

"First, education for the under-fives. There is a higher proportion of three and four-year-olds in nursery education than ever before - up from 39 per cent in 1979 to 43 per cent this year."

"Second, primary schools. We're spending 18 per cent more on each child in primary schools than in 1979. These youngsters are the microchip generation. But they must leave at 11

being able to read and to write and to speak English properly. Last week I announced an increase in primary teacher training of 20 per cent over the next three years."

"Third, secondary schools. Some are very good. But many, particularly in our towns and cities, are letting the children down. Many 14 and 15-year-olds find school boring and irrelevant. They play truant, they bunk off. Last week Her Majesty's Inspectors reported that a school in Brixton had a truancy rate of up to 50 per cent. This won't do. We must capture the interest and imagination of children and show them that education is worthwhile."

"Fourth, pupil-teacher ratios. This year the pupil-teacher ratio is the lowest ever, 17.6:1. Next year my aim is that this figure will be even lower."

"Fifth, higher education. There are now more students in HE than ever before - 138,000 more than 1979. The proportion of 18 and 19-year-olds

'I want to see headteachers win back the standing they had 50 years ago'

entering HE has increased from 12 to 14 per cent, and I aim to increase this even further."

"In particular take pride in our polytechnics. The number of first-class degrees awarded this year in our polytechnics increased by 24 per cent and last month I agreed that an extra £54 million should be made available for the polytechnics and colleges for the next year - an increase of 8 per cent."

"It is in our cities that the education system faces its greatest challenges. Many parents, despite the pressures of daily living, want the best for their children. It is the task of our Government to meet those aspirations."

"I have therefore decided, with the enthusiastic backing of the Prime Minister and my colleagues, to launch a pilot network of new schools in urban areas, including the disadvantaged inner cities. These will be called city technology colleges. They will widen parental choice in the urban areas covered by the network. They will increase the range and quality of

education in areas where it is needed."

"CTCs will have these features: (1) they will be for 11 to 16 and the education will be (2) they will be governed by independent schools, local trusts, and not part of education authority; (3) they will be financed by (4) they will have a strong emphasis on technical and practical, business and design; (5) they will offer a variety of enterprises, self-responsibility, and second possible standards of achievement; (6) I am planning initially a network of around 20 CTCs with 750 to 1,000 pupils; (7) they will be located in inner city areas and back grounds will be of education which will provide. Next week I will publish a booklet with fuller details of my potential proposals. I see the first CTC will open in 1988."

"This exciting initiative offers new opportunities. There are offer hope to many young people. It points the way."

"I also want to see: (1) basic elements of education in a moral and disciplined way; (2) children taught to respect; (3) children of our age sent with challenge, not to mediocrity by Labour; (4) girls getting an even better education; (5) more young people going for education and training; (6) more young people at college because I believe that an educated nation is a more powerful nation."

"In that better future I see parents and teachers joining you, in fighting for standards, in fighting for

D	I	A	R	Y
I	A	R	Y	
A	R	Y		
R	Y			
Y				

Dropping bricks

With luck, Bob Dunn has a better memory for faces than his former boss Sir Keith Joseph. The man in charge of the nation's schools is off to Bradford next week and will be meeting the likes of Eric Pickles, now deputy leader of the Tories and a former chairman of Bradford's education committee. As Sir Keith is MP of a neighbouring constituency, Pickles has encountered him on numerous occasions during the past 20 years.

"But he never remembers me," he said. So one day at a formal gathering Sir Keith shook hands yet again and yet again asked who he did. Pickles thought to himself: "I am a bit fed up with this and the man is obsessed with occupations." So he said: "What do you do - I mean in real life?" Pause. Sir Keith replied: "I suppose I was a builder." "No, I don't think I was." "Is that why you became a politician?" Longer pause. "Perhaps it was."

Party hopefuls

Education proved so popular that 67 representatives (Tories don't have delegates) wanted to speak in Tuesday's debate. Only nine were chosen, most of them prospective parliamentary candidates - and Ambrose Nell, the Tories' favourite ethnic minority, whom the platform informed us, is on the look out for a seat. Any others?

Sleeping partners

Politics makes strange bedfellows. What do Italian socialists and the Tory Right have in common? Both think that education vouchers are a good thing. The right-wing Institute of Economic Affairs warned Tories in its journal, published on the eve of the conference, that they might not have the monopoly on this loony idea. If the deputy leader of the Italian Socialist Party thought vouchers were a good idea, other political parties might espouse the cause. It might have saved the link Kenneth Baker slightly avoided even mentioning vouchers in his reply to the education debate.

Another decidedly dry organization, the National Council for Educational Standards, informs us that it is holding a meeting later next month. Platform speakers include people known for their educated opinions: Rhodes Boyson and Brian Cox.

Also David Hart, general secretary of the National Association of Head Teachers.

Tough speaking

Overheard in bar: "I tell you one thing: there's more politics going on in universities than in my line of business. And look at the teachers - they are tough, even ruthless." The speaker was Anthony Beaumont-Pick, MP for Birmingham Selly Oak. Given his kind of maverick politics, this was probably a compliment.

No free time

Jonathan Savory, the teacher at the centre of a race row, was refused time off by Avon County Council to attend the Freedom Association fringe meeting. Earlier this year he kept his job with the Multi-Cultural Education Centre after a disciplinary hearing rejected claims that his *Sallybury* review article was racist. He promised the council he wouldn't embarrass them by referring to the case but picked these words: "I am more embarrassed by hearing him."

Acronym

A smooth operator who could be on line for No 10

Just over 44 per cent of voters believe that Kenneth Baker would make a better Prime Minister than Mrs Thatcher, according to a Marplan opinion poll taken last week. After Monday afternoon's speech that figure may well have risen.

Not that Mrs Thatcher need worry too much. It's not the voters who pick a Tory party leader but MPs, and the poll confirms that among them she has an overwhelming lead.

Until Monday Mr Baker was thought of by most MPs as a smooth operator who fancied his chances of Number 10 following the demise of whoever follows the current occupant. The next PM but one so to speak.

Mr Baker's weaknesses are that he is too good on television, which MPs who are not, or never get asked, don't like. And politically he is a bit of a wet, which is still a handicap in the leadership stakes.

But Monday's performance won him friends in the strangest of places.

Barry Huggill on the reaction to Kenneth Baker's Conservative conference speech

In the course of his 35-minute peroration he won over Sheldon Man in the shape of Michael Forsythe, the slight but hard Tory MP who likes to think of himself as the conscience of the Tory Right, and Dimitri Argyropoulos, the sometime *TES* columnist and aspiring Conservative MP who makes Shirley Williams look distinctly reactionary.

It was a superb political performance. To Mr Forsythe and his friends in the "save our schools campaign" he pledged unyielding support for the much-loved village school. And as far as Mr Argyropoulos is concerned he kicked vouchers, open enrolment, the 11-plus and other eccentricities firmly into touch.

In short, Mr Baker had something for everyone. And they loved it. Sir Keith never gave anyone anything.

There were grumbles that vouchers yet again had been dismissed - Mr Baker didn't mention them once - unlike some speakers from the floor who had received great cheers. And most Tories still have a soft spot for the grammar schools, skilfully exploited by the Minister with a below-the-belt reference to poor Mrs Williams "one of the great destroyers of these schools".

Destroyer she may have been but Mr Baker has no intention of repairing the damage. Forget all the stories in the newspapers - grammar schools are definitely not on the agenda.

But Mr Baker is. The Marplan poll showed that he had little support as a successor to Mrs Thatcher among his colleagues in the House. If he continues to please the wets while appeasing the dries as he did on Monday the next poll could tell a different tale.



The Education Secretary won a standing ovation

Flora's guide to what makes you tick.

WEIGHT

FOOD CHOICES

BLOOD PRESSURE

FITNESS & EXERCISE

STRESS

If you're involved in food, nutrition and health education, then naturally you'll be interested in the role of fats in health and diet.

With the help of specialists, the Flora Project for Heart Disease Prevention has produced a new range of leaflets on this vital subject.

To find out what makes you tick, put a few seconds aside to fill in the coupon.

Post to: The Flora Project for Heart Disease Prevention, 26 North Row, London W1R 2BY. Tel: 01-499 0414.

Please send me my free set of heart health risk factor leaflets. (Allow up to 28 days for delivery.)

Name _____

Address _____

Van Den Bergh & Janssen Ltd, Registered in London No. 485000. Registered office: Bury St Edmunds, Suffolk IP11 1AA.

ADVANCED DIPLOMA IN EDUCATIONAL STUDIES

Seven programmes are offered leading to the award of the Advanced Diploma.

Educational Thought

Two units, *Foundations of educational thought*, and *An Exploration of educational problems*, are taken, with two additional options.

Secondary Education

The programme offers a broad grouping of four units which may include: *14/19: education and training*; *Secondary organisation and Management*; *Changing the Curriculum*; and/or options on pastoral care, personal and social education.

Pastoral care, personal and Social education

This offers two linked units, *The pastoral curriculum*, *personal and social education and Guidance and counselling*, with two optional units.

Education in primary and middle schools

A double unit, *Teaching, learning and the curriculum* 3-13 may be complemented by *Curriculum studies* 3-13 and *Organisation and Management in Primary Schools* or other options.

School organisation and management

A unit on *Organisation and Management* in either primary or secondary schools is followed by *Applied Management in Education*, with two optional units.

Special Educational Needs

Two core units, *Structure and organisation of services for children with special needs* and *The nature of the curriculum for children with learning difficulties*, are followed by two further units, including *Psychology of assessment and intervention in children's learning difficulties*.

Curriculum Studies

Two linked units, *Evaluation in theory and practice*, and *Changing the Curriculum*, are offered, with two additional options, one in the curriculum field.

Write for handbook to: The Secretary, Cambridge Institute of Education, FREEPOST, Shaftesbury Road, Cambridge CB2 2RQ or phone 0223-49631

Cambridge Institute of Education

NEWS



THE MAIN INQUIRY

James Meikle analyses the Main Committee's report on Scottish teachers' pay, and its implications for the Coventry package for England to Wales

A package deal that cannot be split up

Sir Peter Main is pleased with the initial response to his Committee's report and is glad that most interested parties were reluctant to make judgements before reading the small print of the proposals. Where there was doubt, it could be ascribed either to the complexity of the material or to lack of success by the Committee in expressing their ideas. For example, the Committee's use of the terms "notional working week" and "standard week" had caused puzzlement. "I would not want teachers to get the impression that we are asking them to work longer hours," he said. "There is no increase implied in establishing the 35-hour week."

He was sorry to have heard a primary teacher complaining in a radio phone-in about the fact that secondary teachers would still be paid £400 more at the top of the scale. "We took the view that a pay distinction, although small, should still be made since the secondary teacher has the responsibility of preparing for external examinations." Meeting Sir

Peter at his home at Duhain Bridge, close to the River Spey, he was relaxed after his exertions, and happy to talk about the problems the Committee had faced.

"The most difficult problem? 'I personally found the conditions of service aspect the most difficult. Describing the professional role of a teacher was also tricky. As for pay, once we had established a base by comparison with other graduate jobs, we had to look at the scales and salaries which emerged, and do a lot of adjusting until they looked right."

We talked of the emphasis in the report - and on the areas only roughly sketched in. "We spent a lot of time and space in the report on the headteacher, and that is an area where already there has been adverse criticism. But we asked ourselves where the heart of good management lay, and we decided it lay principally with the headteacher. If he or she were to accept a statement of duties in their contract, then that might persuade other teachers to show less

objection to it." The independent pay review body, Sir Peter believed, would have been a good idea, since all would be surrendering autonomy. The unions will realize the benefits of such a review body, and I would hope that the Government would honour its recommendations."

Sir Peter talked of a visit he had made to two teacher primary where he had become "distracted by the teachers' job in perspective."

His final words were on the package deal. Referring to the key recommendations, he said that they had to be accepted together. "The Government can pick and choose any more than the unions can."

NUT to campaign for improved salary deal

The National Union of Teachers wants to change the pay package agreed in outline with employers in England and Wales.

The union is pressing for a far-faster switch to a new salary structure and wants to reduce the length of time taken to get on top of the proposed Main Professional Grade. This would add considerably to the costs of the package.

The pressure for improvements is bolstered by the publication of the Main inquiry recommendations for Scotland which say pay rises averaging 10.4 per cent ought to be awarded from October 1 and a new pay structure should be in place by February.

The pay and structure package being negotiated in England and Wales will take five years to implement for most teachers and substantially longer for some.

The Main recommendations are likely to stiffen the resolve of union leaders in England and Wales to press for more staff to get principal teachers' allowances. Heads and deputies will also point to the Scottish example in an effort to get their proposed salaries and differentials increased.

Yet as Main threatened to put a further strain on progress in the English and Welsh negotiations, teachers and employers were keen to stress that the Coventry plans held out a better long-term future for staff than the proposals for Scotland.

The employers' leader, Mr John Pearson said the Main proposals "give the lie to those who say Coventry was a sell out". Main says its pay recommendations should last to April 1988 - while another pay claim for England and Wales is due for next year.

Main also sets a lower maximum on salaries for teachers on the basic grades, pays less to long-serving primary teachers and secondary staff with similar service maximum: £12,500 compared with £12,900.

The English and Welsh package allows for all teachers to reach a £14,500 ceiling.

Its supporters also extol the virtue of its collegiate approach against a more hierarchical structure and new posts suggested for Scotland, although they recognize that the Government may be more attracted by Main.

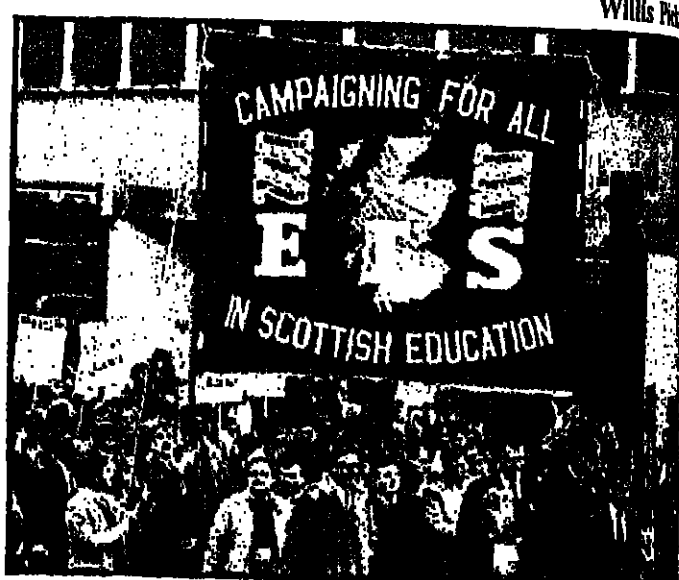
But the greatest fear of the three biggest unions south of the Border is that ministers will want to set up an independent pay review body to replace negotiating committees, along the lines recommended by Main, and go for two-year settlements.

The National Association of Schoolmasters/Union of Women Teachers, which is refusing to back, even in principle, the package in England and Wales, said comparing Main and the alternative was like comparing "a disaster with a tragedy".

Mr Fred Smithies, the NAS/UTW general secretary, said: "The idea of teachers agreeing to be trendsetters in accepting biennial pay settlements is totally objectionable. If such a trend is to be established, let it come to public-sector workers from the example of workers in the private sector."

The union aims to take the matter up with the Trades Union Congress and the Scottish TUC.

Other unions warned that the Government was not compelled to honour pay recommendations from indepen-



The Scottish pay action has lasted two years

dent bodies, and said it had not honoured fully recommendations on nurses' pay.

Mr Peter Smith, the deputy general secretary of the Assistant Masters and Mistresses Association, said: "At the very time that people are coming to the negotiating table and are prepared to trade, you should not drop up on them. That would be extremely foolish."

The unions in England and Wales are also wary of proposals in Main to give more power to heads. They recognize that the lack of governing bodies in Scotland creates a different situation in schools, but have warned the suggested tight of veto over appointments could herald a new system of hidden patronage.

Mr Peter Dawson, the general secretary of the Professional Association of Teachers, while he was not out to whether heads among his members would want such control, said: "The commonest complaint is that they have to assume more and more responsibility with less and less power."

Mr David Hart, the general secret-

Plagued by misbehaviour and short of resources

Key statements from the report include:

"The burden of maintaining discipline has increased sharply following the abandonment of corporal punishment by many schools in 1982... We have little doubt that standards of behaviour have declined, and we must record the extent and depth of feeling among teaching staff that they do not receive the support of parents or authorities that they should expect."

"We urge a greater decentralization of authority to schools, an enhancement of the status of the headteacher and a system of promotion and appointment procedures that ensure advancement on the basis of professional merit, openly and objectively assessed... We advocate a determined drive to improve the environment in which teachers work, by the provision of more resources - even if that means more school closures so that the savings can be used to the benefit of other schools."

"We understand quite clearly the Government's firm resolve to maintain control over public expenditure and their commitment to reduce the proportion of national income that is accounted for by public expenditure. Equally, we recognize that the Government's plans have never been immutable, either for the total or the distribution of public expenditure among services."

A collegiate type of management structure, as seemed to be indicated by the Heads of Agreement for teachers in England and Wales, "would not be in the interests of Scottish education... It would make little contribution, for example, to the retention and motivation of teachers."

"By any standards these are generous recommendations, especially when judged against rates of inflation far below those pertaining at the time of the Houghton and Clegg awards."

Need for new negotiating committee

The "fundamentally flawed" joint negotiating committee for pay and conditions should be replaced by a review body of up to five independent people, appointed by the Secretary of State for Scotland, which would report every two years, says the Main Report.

The Secretary of State could amend findings "in the light of what he considered could be afforded" but the Government would find it difficult to override an independent body whose recommendations commanded public respect.

Teachers and employers in England and Wales have still to agree on a replacement for the statutory Burnham pay negotiating committee and the non-statutory Council of Local Education Authorities' school conditions body.

The National Association of Head Teachers has put forward proposals for a committee for both pay and conditions with separate standing committees with delegated powers, including one solely for heads and deputies.

Cheque In Magazines - informative, fully illustrated colour magazines devoted mainly to money-related topics.

How to Use a Bank Account - this booklet describes in a simple but imaginative way how a bank account operates.

Interview Checklists - provide an excellent and brief summary of guidance for job interviews.

Report stresses flaws in present conditions package

The Main Report says pay rises averaging 16.4 per cent ought to be awarded to Scottish teachers from October 1, and that a new pay structure should be in place by February. It recommends a review of staffing standards in schools and says the lack of a limit on the time a teacher spends covering for absent colleagues is a flaw in present conditions of service.

The number of days pupils spend at school in a year should be cut from 200 to 195 - with the balance of five days used for in-service training, curricular development and free time for liaison with parents during school hours.

The standard working week should be 35 hours. The time teachers should be expected to be in school should be 27.5 hours a week. The school week for pupils should be 25 hours in primary schools and 27.5 hours in secondary schools.

The maximum class contact time for primary teachers should be 25 hours for primary teachers and 23.5 hours for

secondary teachers. Two hours a week, on average, should be set aside for "programmed activities" determined by the head and authorities. Existing class size limits should be modified.

The Coventry negotiations agreed that the number of days pupils spend at school in a year should remain at 190 but that teachers should be expected to work another five days on activities such as in-service training.

Negotiations are continuing on maximum number of hours per year, limits on cover, non-contact time and class sizes.

The report suggests that Scotland should follow England and Wales in adopting separately funded arrangements for midday supervision. It urges the Government and local authorities to examine how they can provide adequate ancillary staff by next year.

It also recommends a system of appraisal based on nationally agreed guidelines and procedures. Teachers

and employers in England and Wales have already agreed to set up pilot projects.

Main suggests such developments should start with heads and senior staff and calls for discussions on appraisal between teachers, authorities and the Scottish education department.

The proposals assume an appraisal of every teacher every two years at an estimated annual cost of £3 million.

The Main committee suggests a brief list of duties than the 19 points being considered under the requirements for Main Professional Grade teachers in England and Wales. They are:

- To teach assigned classes; to prepare lessons and courses; to undertake development of the school curriculum; to assess, record and report on the work of pupils; to present pupils for and to participate in the conduct of national examinations; to undertake post-qualification training; to contribute to the professional development of colleagues, including probationary and student teachers; to participate in the administration and organization of the school; to maintain good order and discipline among pupils and to safeguard their health and safety; to advise and guide pupils on issues related to their education; to report and to discuss pupils' progress with their parents.

The Committee also says that:

- All authorities should offer headteachers a greater role in the selection and appointment of unpromoted staff.
- Headteachers should have the power of veto over all appointments of teachers to their schools.



THE MAIN INQUIRY



Teaching children the financial facts of life.

Midland Bank has recently put together a comprehensive range of publications, videos and services designed to help secondary school teachers educate and involve their students in financial matters. These cover a wide variety of subjects from simply opening a bank account to setting up a business.

Highlights of this FREE schools resources package include:

Cheque In Magazines - informative, fully illustrated colour magazines devoted mainly to money-related topics.

How to Use a Bank Account - this booklet describes in a simple but imaginative way how a bank account operates.

Interview Checklists - provide an excellent and brief summary of guidance for job interviews.

The Banking Matters video and Speakers Support Pack trace the history of banking and use real-life situations to illustrate the functions of a bank and a bank account.

Other resources include School Talks, the Midland Banking Game, and the Life at University video. A visit to the local Midland branch can also be arranged.

Midland has already opened computerised in-school banks in hundreds of secondary schools throughout England and Wales, and will be happy to discuss opening such a facility in your school.

We are also an active sponsor of the Young Enterprise scheme and can offer work experience placements for those interested in a career in banking.

If you would like to make use of any of these resources or want to know

more about the contents of the Schools Resources package, please write to Kaye Skett at Customer Information Service, Midland Bank plc, P.O. Box 2, Freepost, Sheffield S1 1AZ.

Please send me details of the FREE Midland Services for Schools package. ☐

Please arrange for someone to contact me to discuss the Midland Services for Schools package. ☐

Name _____
School _____
Address _____
Tel. _____ Ext. _____

Midland
The Listening Bank
© Midland Bank plc 1986

YOUR SCHOOL CREST BEAUTIFULLY EMBROIDERED IN UP TO 5 COLOURS ON OUR MACHINE WASHABLE SWEATERS AND SWEATSHIRTS.

More and more schools are offering our garments instead of the expensive blazer. Parents welcome the change, schools can add to their funds. We offer sweaters and sweatshirts, an excellent range of sizes and colours and a first-class service to customers. Write NOW for free colour leaflet and fabric cuttings to Andy Mannott, Symbol Sewers, Burnaway Factory, Galston, Ayrshire KA1 5HF. Telephone 0563 824313.

Balmoral Knitwear by Symbol

BUY DIRECT FROM THE MILL. Also suitable for sports teams, clubs, etc.

McOllip and FCOllip
College of Preceptors
Membership
for those engaged in Education

Introducing The College of Preceptors
The College of Preceptors is a professional body in England & Wales for teachers and lecturers. It is a privileged body that has been granted a Royal Charter in 1964. It is an independent and international forum for debate on educational issues, and its members enjoy many benefits.

For a copy of the Guide to Membership and for further information, The College of Preceptors, 40, Bedford Square, London, WC1E 6HE.

Coventry proposals		Main recommendations	
Teaching force	400,000	50,000	
Restructuring	5 years or more	By April 1987	
Next pay award	January 1 1987 (75%)	April 1986	
Cost of proposal	£2.4 billion. Annual cost - 1986/7, £364.2 million (including 5.7 per cent on account on April 1, 1986); 1987/8, £351.4 million; 1988/9, £452.2 million; 1989/90, £370.2 million; 1990/91, £354.4 million	1986/7, £307 million (including 5.5 per cent on April 1, 1986); 1987/8, £310.6 million	
Grades and salary structure	Entry grade £7,800 first year, £8,000 second year Main Professional Grade - salary range from £9,500 to £14,500 with annual increments of £800 a year, rising to £1500. Twelve years from Main to top of grade Principal Teachers - at least 15 per cent of all teachers, receiving payments of £780 or £2,000 in arrears allowances Heads and Deputies - heads from £15,500 to £28,500, deputies from £14,750 to £21,250 SLL to be retained - provision of special schools Teachers' employment - no compulsory early retirement, averaging about £1,000 to £1,500 a year Exact number of Principal Teachers, Heads and Deputies will vary with circumstances Employers duty only to calculate and grant improvements Laid-off payments, in some cases more than 40 per cent over 10 years, put in the lowest paid teachers. Some teachers accepted with 7.5 per cent	Basic scale of 10 points for all unrepresented teachers ranging from £7,600 to £12,500 for primary and £7,900 for secondary teachers Suggestion: new post of Master Teacher to look after primary and secondary schools involving 100 teachers over three years. Estimated cost £1.5 million. Master-teacher salary £14,500 Assistant Principal Teacher, as presently paid £15,700 to £16,500 Principal Teacher (as presently paid £15,700 to £16,500) Assistant Headteacher, £15,500 to £16,500 in secondary schools Deputy Headteacher, £15,500 to £16,500 in secondary schools School secretary, £11,000 to £12,000 School clerk, £10,000 to £11,000 The cost of 16.4 per cent pay rise for 50,000 teachers over three years is £1.5 billion. This cost will be shared by the Government and the Local Education Authorities.	

Plugging into the media revolution



More than £100,000 is being spent by Wigan education authority on a new media centre - opened last week at Leigh College.

Set up to generate media education in all schools and colleges in the authority, the centre is the first of its kind to be funded by an L.E.A. A further £15,000 comes from North West Arts, and £7,000 a year from the British Film Institute will fund one staff post for three years. Thereafter it will be taken over by the authority.

The authority regards the media as a major cultural influence on children. So work at the centre will take in both theoretical and practical studies.

Teachers will learn how to analyse the way television or newspapers can represent issues. They will also learn how to use recording and editing equipment in order to understand the practical concerns which affect programme makers' decisions.

Housed in what was an old grammar school, the centre contains a two-camera TV studio that can convert into a 64-seat cinema, a control gallery with mixing facilities and a separate room with tape editing equipment, to which staff hope to attach a computer graphics system. An empty sound studio is waiting to be equipped for radio production.

Six full-time staff will run the centre - four teacher advisers and two technicians. At least half their time will be spent in schools, according to Mr Ken Gouge, drama adviser for Wigan. The rest of their time will be spent largely running training courses for teachers.

The hope is that, once trained, teachers will involve their colleagues in media work - either as a subject in its own right or introducing aspects of it into other areas of the curriculum.

The developments in Wigan are unusual in that they are authority-led but the education committee decided about five years ago that media education was important right across the curriculum. Since then, the TVEI project has offered new openings and

Gillian Macdonald reports on a local education authority's attempts to get to grips with the culture of the 1980s.

the Department of Education and Science report on *Popular Television and Schoolchildren* (1983) has added new impetus.

Wigan has eight schools involved in the TVEI project and studying the media. TVEI money has provided them with about twice the equipment they could otherwise have afforded. Another three or four secondary schools do a considerable amount of work on the subject, in particular St Peter's Roman Catholic High School in Orrell, which has a two-camera television studio with control gallery. It now has some form of media education throughout the first to third-year curriculum, with the Northern Examining Association's GCSE syllabus in media studies on offer to fourth-year pupils. It is this kind of pattern which the centre's advisers wish to promote.

There are also about 10 primary schools using media education regularly, but Mr Gouge hopes that the demand will "grow apace with teachers going from the centre". The barometer of success or failure for the centre will, he says, be the extent of future activity in the schools. He cites drama as a model for what he hopes will happen. Wigan already has a sister drama centre, also attached to Leigh College, and the subject is now firmly established in most of the authority's schools. "We are starting five years later with media education."

Teachers and classes can book the equipment and come in and use it, says Helen Woodward, the centre's co-

ordinator and a teacher adviser. But a number of "user-friendly" portable audio and VHS video recorders are also available for the centre's staff to take out to schools.

The centre also provides a library which is well stocked with teaching material from the British Film Institute, the Society for Education in Film and Television, the Scottish Film Council, the Irish Film Institute, the Centre for Educational Technology at Clwyd in Wales, and ILEA's English Centre. These are for reference only, but many are cleared for copying.

The six permanent staff have backgrounds in English and history, publishing and art - reflecting usefully the wide spectrum of areas from which first generation media teachers are still being drawn.

Ken Gouge has been pushing for years to establish media education on the curriculum. He sees teacher advisers in the school as the most effective way of bringing about change.

"We have to help teachers develop change in the classroom and to show that media education - particularly in primary, but also in secondary - can work in a whole range of areas. You make it part and parcel of what you are doing, and teacher advisers are the most effective way of doing that."

The centre also provides facilities which the authority cannot afford to put into all the schools. And it is there that the staff will run training courses. They have already held two in-service days for 12 primary teachers and two secondary teachers. Publicity has been circulated throughout the authority and the centre is already in touch with about 36 schools. Teaching materials will eventually be produced in association with teachers, but this is a later consideration. It is a question of "in-service first, materials second," says Helen Woodward. "At the moment we have the facilities and now we have to pick up on the demand. We have to find out where it is and what form it takes."

Advisers 'uneasy in new role'

The job of advisers cannot be regarded as a simple extension of teaching, a National Foundation for Educational Research study director said this week.

Mr Andy Stillman told a conference of advisers and local education officers: "One should no longer expect them to slide from one role into the other."

He told an audience at the new Centre for Adviser and Inspector Development at Wollay Hall, Wakefield, that the job had changed so fundamentally in the past 10 years that new entrants now required induction training.

Mr Stillman, who is running an NFER study on the advisory service, said the change of role had left staff feeling uncomfortable. "Many were appointed when local education authorities were seeking single-subject expertise - the opposite of the present situation."

One of the most radical changes was the disappearance of the distinction between the adviser's and the local education officer's role. The adviser was now more of a general local education authority representative. "This is a new role for many - being involved in re-deployment, going to governors' meetings... but it has not been accompanied by any greater role in policy-making."

The move to a generalist role had been accompanied by a move to greater integration of subjects. There was pressure on local authorities to demonstrate cross-curricular expertise but this was not what advisers were prepared for.

Professor Ron Glatter, of the Open University, said that the advisory service now fulfilled the role of educational watchdog. It was the most difficult, but most important of all functions. "Advisers need to be local guardians of educational effectiveness - as distinct from efficiency."

Greater involvement in personnel management, particularly staff development, was also required of the modern service. "The adviser will be seen as an organizational assessor," Professor Glatter said. "Both curricular and managerial skills will be needed."

Advisers ask HMI to specify English needs

by Sue Surkes

The National Association of Advisers in English has called on Her Majesty's Inspectorate to specify the kind of teaching approaches that would be needed to meet objectives proposed in *English from 5-16: The Response to Curriculum Matters 1*.

The document, published three months ago, was designed to reflect the theme of 913 responses to HMI's original and much-criticized 1984 publication *English from 5-16*.

In a statement, which includes much praise, the association says it "regrets HMI's reluctance to describe classroom approaches by which the proposed objectives might appropriately be met. This need not involve the massive exercise which HMI rightly feels to be inappropriate. A fairly brief description of those classroom approaches associated with successful teaching would be a huge step forward."

The association also says HMI should have emphasized more strongly the importance of seeking positive achievements in pupils' work. The



Daily worship: assemblies for multi-ethnic schools

Bradford tries out alternative assemblies

by Julia Hagedorn

Muslim, Sikh and Hindu assemblies are being held in Bradford schools in an attempt to provide an act of worship for children who are regularly withdrawn from Christian assemblies.

The "alternative assemblies" are one of various ideas being tried out in a pilot project involving 20 primary and secondary schools.

The scheme is run from Bradford's Interface Education Centre, which was set up earlier this year to help schools implement the authority's new RE syllabus.

A report on the scheme will be presented to the council on December 4, when it will be decided whether or not to publicize the results.

One of the schools involved, Parkwood First, where just over 40 per cent of the pupils are from ethnic minorities, is holding alternative assemblies every other week in a different faith.

The school believes that this is one way in which the stipulation of the 1944 Act that the school day should begin with an act of collective worship, will be made more meaningful to its pupils.

Brent puts faith in new syllabus for all religions

by Bert Lodge

A few months after he became a parliamentary candidate for Brent North, Dr Rhodes Boyson remarked to a journalist with considerable surprise: "The churches are full up here, you know." Last week a public meeting to launch the borough's new religious education syllabus attracted over 200 people. Religion matters in Brent.

It matters to a lot of religions. From the platform of that meeting Mr Ron Anderson, chairman of the education committee, announced with evident pride that whereas the mighty Inner London Education Authority had no more than two or three non-Christian faiths on the committee which produced its new syllabus, Brent had ten.

What is more the committee of 65 members represented a population which is more than 50 per cent black or Asian.

Dr Owen Cole, head of religious studies at the West Sussex Institute of Higher Education and author of many books on world religions, was delighted: "It is an historic occasion. We have to re-think our British heritage and introduce children to the world heritage."

In the past the purpose of religious education was to hand on the Christian faith, he said. Teachers were expected to be Christian. Even now the present position of RE was ambivalent. In West Sussex, for instance, the syllabus was still Christian-based and Christian-commending. But a quiet revolution was taking place and instead of nurture the aim of religious education was now understanding.

But what are the parameters, asked Dr Cole. "Do we include the Rastafarians? Or the Unification Church?" Prudently he did not answer these questions, although adherents to these faiths could point out they were probably more familiar to the majority of Brent citizens than, say, Zoroastrianism or Jainism, which are included in the syllabus.

The threat to RE, said Dr Cole, could come from religious believers who insisted on withdrawing their children from classes, or it could come from a political direction. There were those who wished to pretend Britain was still a Christian country or alternatively maintained that religion had disappeared altogether "so why encourage it in schools?"

Dr Cole's concluding remark would have undoubtedly been provocative in West Sussex, but was safely uttered from a Brent platform: "The white imperialist corpse is still tended with more care than the living black," he said. Then he was off with no time to answer.

However, it is unlikely there would have been many questions about the syllabus, which is bland and uncontroversial. Indeed, it is hardly a syllabus, more a prescription for one.

"Children should be encouraged to explore and discuss some of the fundamental questions of human existence... appreciate the value of their own personal faith. Children should be encouraged to develop qualities of thoughtfulness, fairness and respect for others... become acquainted with significant occasions and celebrations from various religions."

Lists of suggested themes for secondary level study include initiation, marriage, death, family life, rituals, signs, symbols and art, stories and myths. "These lists are not exhaustive," we are told. Not across 10 religions with at best two periods a week?

Some Christians may regret the passing of the pre-eminence of their faith in religious education. The lady at the Zoroastrian stall was delighted. "When your children do not see the religion of the family given any recognition in school, they begin to think it hasn't any value. Now they will see it has."

CDT changes direction at Crewe

by Hilary Tagg

A unique drive to interest women in craft, design and technology teaching has been launched by Crewe and Alsager College of Higher Education.

The college has become the first in the country to appoint a publicity officer solely for CDT - Dianne Meredith. She will be targeting her recruitment campaign specifically at women because they currently hold only 1 per cent of CDT posts.

Dianne Meredith says her mini objective is to educate people out of the widespread misconception that CDT is merely "updated woodwork and metalwork."

She sees it as a "new subject area" and intends to increase the quality of students. "CDT is designing and making things through identifying and

solving problems and then overcoming them with the technology available," she said.

One stumbling block she is already aware of is that CDT is not taught beyond the third year in some schools and not at all in many others. "People just don't know what CDT is," she said.

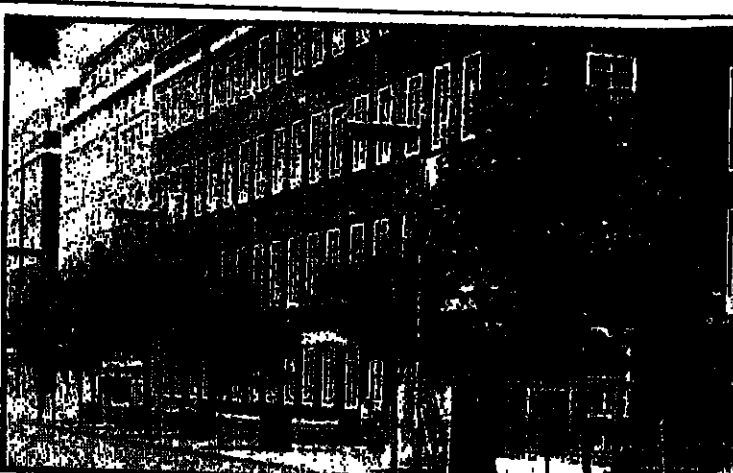
In an attempt to rectify this, Ms Meredith will be advertising extensively in schools and colleges, as well as in local press and radio.

John Clayton, head of art and CDT at the college, explained that Manpower Services Commission money had made Ms Meredith's appointment possible. "There is a crying need to attract more and better quality students into CDT," he said. Publicity is essential because all colleges are

fishing in the same pool."

Ms Meredith, who will also do some teaching, will aim her publicity at school-leavers, students who have just completed foundation courses and those who have taken B Tech courses in subjects related to CDT.

The courses offered at Crewe and Alsager include a four-year BEd honours degree in CDT, a two-year BEd for people with previous industrial experience, a one-year retraining course for teachers of other subjects, and a post-graduate course for those with design-related degrees. The college is also developing a one-year conversion course designed to attract women who have left work to raise a family and are now eager to begin a new career.



Birkbeck faces cash crisis

Birkbeck College, the London University college specialising in part-time degree courses, expects a deficit of between £2 million and £7 million by the end of the decade.

Mr Kenneth Baker, Education Secretary, was warned of the financial crisis last week, when he met a deputation led by Mr Michael Wise, chairman

of governors, and Professor George Overend, Master of Birkbeck.

Mr Baker was asked to open an inquiry into the costs and benefits of part-time education. The college claims its style of education is 28 per cent cheaper than full-time higher education.

CGLI finds a partner

The City and Guilds of London Institute and the West Midlands Advisory Council for Further Education have signed a memorandum of agreement to streamline provision of existing courses.

The partnership - said to be the first of its kind between the CGLI and a regional body - follows in the footsteps of the Review of Vocational Qualifications and the resulting Government White Paper, *Working Together*. It covers the new unit-based scheme and vocational qualifications.

The partnership aims to allow candidates to develop the skills required by regional employers within a framework of nationally recognized vocational qualifications.

Exercising the mind...

Secondary schools in Ulster are to be the first outside Canada and the United States to compete in the US Academic Decathlon - a coast-to-coast general knowledge contest which aims to extend to the whole English-speaking world.

The project is being sponsored by British Telecom to mark Industry Year.

The province's Association of Schools Education is inviting fourth, fifth and sixth-formers, grouped into a team of six, to compete in a five-hour quiz at the University of Ulster in February.

The winners will travel to Los Angeles at Easter to pit their wits against contestants from 41 US states.

CONTROVERSIES IN CLASSROOM RESEARCH

edited by M. Hammett
Nov. 86 0 336 16247 3 £7.95 pb 0 336 16248 1 £22.50 hb

CASE STUDIES IN CLASSROOM RESEARCH

edited by M. Hammett
Nov. 86 0 336 16993 4 £7.95 pb 0 336 16994 2 £22.50 hb

ENGLISH LITERATURE IN SCHOOLS

edited by V. J. Lee
Nov. 86 0 336 16346 7 £9.95 pb 0 336 16348 5 £22.50 hb

SCIENCE IN SCHOOLS

edited by J. Brown et al
Nov. 86 0 336 16961 3 £9.95 pb 0 336 16962 6 £26.00 hb

TECHNOLOGY IN SCHOOLS

edited by A. Cross & R. McCormick
Sept. 86 0 336 16235 8 £7.95 pb 0 336 16237 8 £22.50 hb

TIME FOR DRAMA

by R. Burgess & P. Gaudry
Sept. 86 0 336 16249 X £9.95 pb

DESCRIBING LANGUAGE

by D. Gaddol, J. Cheshire & J. Swann
Dec. 86 0 336 16979 8 £9.95 pb 0 336 16980 X £22.00 hb

HEADTEACHERS AT WORK

by V. Hall, H. Mackay & C. Morgan
Oct. 86 0 336 16243 0 £9.95 pb 0 336 16244 9 £20.00 hb

REDUCING EDUCATIONAL DISADVANTAGE

by P. Williams
Sept. 86 0 336 16240 6 £9.95 pb 0 336 16241 4 £20.00 hb

INCLUDING PUPILS WITH DISABILITIES

edited by T. Booth & W. Swann
Dec. 86 0 336 16977 X £7.95 pb 0 336 16978 9 £20.00 hb

PRODUCING AND REDUCING DISAFFECTION

edited by T. Booth & D. Coulby
Nov. 86 0 336 16975 3 £7.95 pb 0 336 16976 1 £20.00 hb

RESIDENTIAL SPECIAL EDUCATION

Living and Learning in a Special School
by T. Cole
Sept. 86 0 336 16184 8 £9.95 pb 0 336 16185 8 £20.00 hb

TEACHING ADULTS

by A. Rogers
Oct. 86 0 336 16234 1 £9.95 pb 0 336 16235 X £20.00 hb

OPEN UNIVERSITY PRESS

12 COFFERIDGE CLOSE, STONY STRATFORD, MILTON KEYNES MK11 1BY ENGLAND. TEL: MILTON KEYNES (0760) 566744 TELE: 82647

ADVENTURE COURSES

EDUCATIONAL TOURS AND SKIING

In Britain, France, Belgium, Holland, Germany, Austria and Andorra.

FREE

Olympus 35mm CAMERA

for every group booking a course or tour for 30 or more students.

30th Anniversary Celebration OFFER

For your brochures simply call 0989 64211 or clip the coupon.

Name _____

School _____

Address _____

Postcode _____

Send to: PGL 150 Station Street, Road on Wyke, Herefordshire HR9 7AH

ILEA pressured to bring forward tertiary plans

by Annette Gartland

The Inner London Education Authority is being urged to speed up the introduction of tertiary education.

The Council for Tertiary Education in Wandsworth, a local "watchdog" group, says the present system fails to meet the educational needs of 16- to 19-year-olds. The council adds that the worst sufferers are youngsters from ethnic minorities, those with special needs and most people who leave school at 16.

The council is asking the ILEA to set up tertiary colleges in Wandsworth, and bring forward proposals to set up tertiary colleges in Wandsworth.

It states that too many schools and colleges in Wandsworth are teaching too few 16 to 19-year-olds. This means that no schools can offer a comprehensive range of courses. At "A" level, some schools and colleges cannot offer, even on a joint basis, the basic minimum of 10 subjects and the chance to learn foreign languages is "in danger of disappearing".

The council also says that schools and colleges are not working together and that most sixth-form classes are below the recommended size.

"Wandsworth is the worst area in inner London in this respect, with many groups of four or less students." Many courses are too narrow, without proper provision for general education, recreation or pastoral care, and the "complicated planning machinery" set up by the ILEA in 1984 has failed to bring about any measurable improvement, the council adds.

"Hundreds of young people are now leaving Wandsworth schools at 16 to go to colleges in other parts of London, especially Kingston and Richmond," says the council.

The ILEA says that the decision to set up tertiary colleges in Wandsworth was taken "in principle" because more information was needed about which buildings might be available. Consultations with Lambeth and nearby Southwark, now nearing completion, had a bearing on Wandsworth.

The authority's review of education for 16 to 19-year-olds has been completed in Tower Hamlets, Islington and Hackney - and its formal proposals are now before the Secretary of State for Education.



Driving ambition: four girls at St Theresa's School for Girls in Lewisham, London spent 18 months building this sports car for the British Petroleum build-a-car competition for schools and youth groups with the theme "A Car for the Year 2000". Members of the only all-women team to enter are (from left) Mary Ah-Kang, Donna Gray, Jane Ah-Kang and Anita Johnston.

IN BRIEF

AMA backs state move

The Association of Metropolitan Authorities education committee is putting its weight behind a campaign to defend state education.

The campaign, initiated by the Inner London Education Authority, aims to unite a wide spectrum of organizations to publicize the contribution made by all sections of the education service, from nurseries to colleges.

Course switch

Government moves to replace specialist courses for teachers of the deaf with in-service training taken later in a teacher's career could discourage ambitious candidates eager for qualifications. The plan could also lead to drop in overall standards, the heads of schools and services for the hearing impaired were told at their annual conference in Manchester.

Choices met

For a third successive year, all first-choice requests for places in the London borough of Richmond-upon-Thames' secondary schools were met. And for a second successive year, no parent from either inside, or outside, the borough had to appeal to secure their chosen school place in the borough.

Free entry

Members of the 60,000 strong Stamp Bug Club - run by the Post Office by young philatelists - will be given free admission to the British Philatelic exhibition at the Horticultural Hall, Victoria, London, from October 14 to 19.

£11,000 prizes

Teachers' Assurance, the insurance company, is offering £11,000 in prizes for schools in a 50-question competition about key dates as part of its organization's golden jubilee celebrations.

Guide published

A practical guide to open learning is just being published by two pioneers in the field. *Into Open Learning* by Mr and Mrs Rowlands, published by New Learning Systems, £6.95, advises colleges on how to set up and run schemes.

Career passport

Young people in Northern Ireland seeking guidance on a business career can now consult a new booklet which details education and training opportunities. *Passport to Careers in Business*, produced by the Northern Ireland Business and Technician Education Council Liaison Committee, describes courses available and profiles students who followed the BTET route.

Funds help

Nursery and primary schools are getting help with fund-raising from Word of Mouth cards. These are Christmas cards which come in eight designs reflecting the multi-cultural nature of Britain's schools. Packaged in boxes of 80 and costing £11.85, they can be resold, by schools, at a profit and obtained from The Old Library, 60 Victoria Road, Margate, Kent CT9 1RB.

BTEC boost

A joint working party with representatives from the Business and Technician Education Council and the Institute of Chartered Secretaries and Administrators has produced guidance for a closer link-up of courses to encourage local authorities to pursue BTEC/ICSA four year training schemes.

Lecture tour

This year's annual Leonardo Da Vinci lecture organized by the Institution of Mechanical Engineers will focus on "Ideas into Action" and will look at engineering innovation in the motor vehicle industry. Principal lecturer will be Dr Peter Watson, chief executive of GKN Technology Ltd.

Patient MSC not forcing pace of college change

Manpower Services Commission control of a large part of further education funding seems so far to have had little effect on the work of colleges, experts said this week.

A team of Further Education Unit researchers is monitoring the implementation of the development plans. Every authority has had to submit its plans to the MSC to qualify for the part of its work-related, non-advanced further education funding which is now channelled through the Commission.

The team, which is closely following progress in a sample of 21 L.E.A.s - a quarter of all the authorities in Scotland, England and Wales - is about to produce a report on progress in marketing and consultation. Alleged shortcomings of the colleges in these key areas were cited by the Government in a White Paper two years ago as reasons for bringing in the MSC.

This week Mr Malcolm Cribb, who heads the study, said that although there had been changes in college practice in these and other fields, these did not appear to be due to the new relationship with the MSC.

"The development plans have had a very marked effect on relationships between the L.E.A.s and employers, and on the motivation and attitudes both of L.E.A. officers and many college managers. But my impression is that they have not yet filtered down very far, had any noticeable effect on practice," Mr Cribb told THE TEN.

On visits to colleges in recent weeks, particularly during enrolment, the team found that many of the staff responsible for teaching and counselling

students appeared to be unaware of the existence of the plans.

"I think it is simply a question of time. There is an inertia built into the system, and it takes time for change to work its way through," Mr Cribb suggested.

None of the authorities visited showed any indication that the MSC was trying to force through change or to interfere in the work of the colleges. "I have not heard of any threat of money sanctions," he said.

In most cases a partnership was being built up, with a pattern of close discussions between MSC area managers and the L.E.A.s paralleled by a similar relationship between colleges

Edited by
Mark Jackson

and MSC area staff. This was despite the fact that, in some instances, there were strong differences of views between the MSC and an authority.

Meanwhile, the FEU is developing a remarkable system for keeping track of changes in college provision.

Totals of students following particular courses and the student hours devoted to them, collected by the DES each year, are fed into a computer which holds full details of the actual content of all the courses. By comparing the two, the computer can produce a picture of the total amount of instruction in any particular subject or skill given by all the colleges concerned.

At present the computer is being

used only to analyse the content of what is being taught in the 21 authorities in the study, but, since they are a fairly representative sample, it would be easy to derive a reasonably accurate picture of what is being provided by the whole FE network. So the FEU could calculate, for instance, how much practical instruction in the installation of hydraulic control systems or in operating industrial sewing machines is being provided throughout the country.

The FEU is only interested in using the system to measure changes in the balance of the curriculum, since it wants to identify the effect of the development plans. But Mr Cribb agrees that if anyone wanted to get a factual picture of what the FE sector is teaching, perhaps to set against criticisms based on subjective impressions, it could be obtained.

In an FEU newsletter its chief officer, Mr Jack Mansell, calls on its readers to support the unit. Its future is threatened by a DES review which favours merging it with another body. Mr Mansell says that the unit intends to go ahead with all its activities and plans until the decision is announced, and he urges readers to make representations to the DES (which has issued a formal consultation paper since the FEU newsletter went to press).

A priority task for the area training networks about to be set up by the MSC (see front page) will be to improve the quality of labour market information fed into the development plans.



Slave wages: the cottings these children are studying could be thought to endorse some union opinion of the Youth Training Scheme. In fact, they are part of an exhibition - organized by the Anti-Slavery Society at TUC headquarters in London - which shows that child exploitation is still prevalent today, mainly in the Third World. The exhibition ends on October 17.

Cuts force dropped lessons

Northampton secondary schools are dropping courses and using more non-specialist teachers because of staff cuts, according to a survey conducted by the six-union conference of teacher organizations in the county.

Responses by head teachers to a questionnaire give examples of dropped lessons in German, science, art and design, sociology and Latin. There is also less help with children with special needs.

Secondary schools in Northamptonshire have borne the brunt of staffing cuts. The council saved nearly £1 million by axing 147 posts this term on top of 36 lost through falling rolls.

Schools lost an average of two teachers each, according to the survey, when the unions claim they should have had extra to cope with demands of GCSE.

The teacher organizations also say that class sizes in primary and middle schools have increased and there is less time for remedial work.

Jamboree promised

A linguistic extravaganza with films, plays, book and course exhibitions is promised for the first national Festival of Languages at the University of Warwick's Arts Centre on Saturday, October 18.

As part of the jamboree, 14 youngsters from all over Great Britain whose languages range from Dutch to Finnish and Greek, will be competing for the title of Young Linguist of the Year and a host of prizes on October 17.

The competition will provide the climax to a series of local and regional youth open to youngsters aged up to 19 who speak at least two languages other than their mother tongue.

The festival will give youngsters of all abilities the chance to demonstrate their talents in language learning through a variety of activities from performances and poetry to computer programmes and cassette talks.

Further information can be obtained from the national coordinator, Mrs Christine Wilding on 0926 633355.

Sue Surkes on a Tokyo-style school to open in Milton Keynes

Marshalling the arts of Japanese learning

A touch of the Orient will come to Milton Keynes next April when scores of Japanese boys and girls arrive for their first day at a Japanese boarding school.

Along with English and mathematics, they will study Japanese language and history. The boys will learn martial arts. The girls will be initiated into the time-honoured pursuits of flower arranging and tea ceremony.

The need for Japanese schooling for Japanese children living abroad was identified by the Milton Keynes Development Corporation during a study of the problems faced by Japanese companies wanting to invest overseas. The town hosts 18 Japanese subsidiaries and about four UK agents for Japanese products.

There are already two Japanese schools in Europe - one in Dusseldorf, the other in Horsham, Surrey. But the Corporation felt demand would outstrip provision as Japanese overseas investment increased and more Japanese businessmen insisted on taking their families abroad with them.

Following a visit by a Corporation delegation to Japan two years ago, the Tokyo and Chiba-based Gyosei International School decided to build

abroad. After considering several possible sites in Europe, it opted for Milton Keynes.

Mr David Stabler, the Corporation's manager of Japan operations, said: "It is critical for Japanese children to be educated in the Japanese system and



Standard lessons: martial arts

environment. If they get out of that system, it is almost impossible for them to get to university or have a decent career in Japan. In some ways, they are treated as outsiders."

The private school for pupils aged 10-18 will start with 600 boarding places and will expand to around 920.

Open to children from all over Europe, the Middle East and North Africa, it will follow the Japanese school year - hence the April start - and the Japanese curriculum and examinations system. It is also expected to follow the gruelling Japanese school day which runs from 7am until 10.30pm. The school will also operate on Saturdays.

But while the school will be directed firmly towards Japan, its pupils will be given more than a passing glimpse of English life. They will be taught English by English teachers and are expected to join local children for lessons in sport and music.

Mr Stabler said the school would give pupils a distinct advantage. They would return home having gained an insight into English language and culture without leaving the Japanese education system.

● Sunderland Polytechnic has set up a Japanese studies division which will run a programme of business seminars and language classes in conjunction with the Polytechnic's business school. Topics earmarked for coverage include guidelines for doing business effectively with Japan and strategies for breaking into the Japanese market.

Girls lack confidence to try for university

Teenage girls shy away from high academic attainment because they fear a loss of femininity, the British Psychological Society conference in Brighton was told last week.

A report by Dr Karen Janman, a psychology lecturer at University College, London, said that many sixth form girls with the ability to win a university place lacked the confidence to take on.

Her research, based on a study of 189 sixth formers in Oxfordshire, found that fewer girls than boys chose to study academic subjects or intended to apply

to university despite comparable O level results.

One of the main reasons given by the girls was that they felt they would lose feminine characteristics such as being cheerful, sympathetic and affectionate and adopt more masculine traits such as being aggressive, ambitious, athletic and assertive.

Girls tended to show a lack of confidence and express concern about the sort of people they might become, said Dr Janman. "There is an idea that it is not the done thing for girls to go to university."

Teacher in TV link-up

A comprehensive teacher has been seconded to an independent television company as part of its joint media education project with West Sussex County Council.

Mr Julian Bowker, from Hazelwick school, Crawley, has joined the community unit at TVS to work alongside programme makers in news, current affairs and children's programmes until Christmas. He is then expected to work with West Sussex teachers, producing media education materials for 10 to 19-year-olds, running courses for newcomers to the subject, and helping the unit to develop programme support and back-up materials.

Tory backs mandatory courses for post-16s

by Barry Huggill

A re-elected Tory government would force all 16-year-olds to stay on in education or undertake training, a government backbencher forecast this week.

Mr Andrew Rowe, the MP for Mid-Kent, said it was more than likely that the Conservatives would make it compulsory in a third term of office for all teenagers to undertake some form of further education or training lasting two years. But the Government would need to pay them all an allowance.

"It is ridiculous to pay YTS trainees an allowance but not those staying on at school or college," he told the former Prime Minister, Mr Edward Heath's supper club meeting in Bexley.

Mr Rowe estimates that the cost of the allowance would be in the region of £1.4 billion, but believes this would be offset by reductions in the bill for other benefits. A youngster failing to attend a recognized course would lose allowance rights.

The distinction between training and education should be abolished, he said. Every 16-year-old should be able to shop around for the best educational



Teenagers would have to be paid an allowance

training and YTS package on offer.

Mr Rowe called for: ● Schools to manage their own budgets with the power to make all decisions and choices over books, staff and other facilities;

● A special staff college for heads;

● The re-introduction of the pupil monitor system, the 19th-century practice of using older children to teach younger ones as a way of saving on teachers' salaries.

Plan to beat training gaps

by Maggie Richards

The Government is to spend £3 million on improving working and planning links between education and industry.

The cash will be used to establish area training networks run by community enterprises, who will monitor schools' colleges, polytechnics and universities what they should provide. The aim is to "spot skill shortages before they become damaging and to brief educational institutions so they can respond in time."

But the networks will also have a longer-term role to improve advance planning so there is a better match between employers' needs and the output of courses. And they will pay

particular attention to shaping and helping the development of the Technical and Vocational Education Initiative in their local schools and colleges.

The new networks hope to use and extend existing liaison arrangements. The scheme will be funded by the Manpower Services Commission and is backed by the Confederation of British Industry and the Association of British Chambers of Commerce.

Mr David Stanley, until now the CBI's deputy education and training director, will head the team setting up the networks. The MSC wants to have a network operating in every local authority within two years, but initially pilot groups will be set up in 13 areas.

NATIONAL FESTIVAL OF MUSIC FOR YOUTH

A Music for Youth Presentation



Royal Festival Hall
Queen Elizabeth Hall
Purcell Room

15 : 16 : 17 : 18 July 1987

Sponsored by:
The Association of Music Industries
Commercial Union Assurance
Marks & Spencer
The Times Educational Supplement

The Regional Audition Series
is part of the W. H. Smith Arts Programme

1987 ENTRY FORM AVAILABLE NOW
Entries are now being invited for the 1987 National Festival of Music for Youth which will take place in the Royal Festival Hall, Queen Elizabeth Hall and Purcell Room, London, on 15, 16, 17 and 18 July 1987.
The Festival is open to young musicians aged up to 19 who speak at least two languages other than their mother tongue.
Independent music groups and community music centres are invited to submit names of potential entrants to the Festival.
For further details and to obtain an entry form, please contact the Arts Council of Great Britain, 100 Strand, London WC2R 0AL. Tel: 01-977 6666.
Closing date for entries: 15 October 1986.

OVERSEAS



Success story: magnet schools have proved popular in many states

New poll blames Reagan team for poor schooling

The American public has just delivered a stinging indictment on those responsible for its education system. A Harris poll reveals that only 40 per cent believe that most children are getting an adequate education, while 56 per cent think that schools are doing a fair or poor job in meeting their responsibilities.

The survey, which covered 1,250 respondents, found 61 per cent supporting increased education spending to improve the schools, and 76 per cent willing to pay higher taxes for the purpose.

Most of the blame for inadequacy was placed on the Government, with only 28 per cent rating the Reagan administration as doing a good job for children. This is one of the worst ratings any government has ever received on a major social issue in a Harris poll.

The survey also covered the feelings of adults towards children in general, and found that three-quarters of respondents believed that problems facing the young - from drug abuse to sexual assault and suicide - have become worse since their youth.



FOUNDED 1970
SCHOOL & GROUP TRAVEL
ASSOCIATION

Choose a SAGTA member
for your guarantee of
complete travel security,
and professional service.
All members are
ABTA bonded

List of members
from
01-642 2490
01-204 6121

Magnet-for-all plan lands city in court

In Kansas City, as the old song says, they have gone about as far as they can go. And that is too far for the state of Missouri, which has taken the Kansas City school district to court over its plan to turn all its middle and high schools, and many of its elementary schools as well, into "magnet" institutions.

There is nothing intrinsically new about the magnet school idea, designed to attract white pupils into predominantly black districts, and thereby achieve integration by a more palatable means than the forced busing of schoolchildren.

Many other American towns have tried the idea with some success, but none has pushed it as far as Kansas City. Its plans call for the "magnetization" of 42 schools, at a cost of \$142 million. The state, which as a result of a 1984 court ruling will have to pay the bill, is objecting strenuously.

The prime architect of the scheme, Professor David Levine of the University of Missouri, claims that it will avoid the common criticism of magnet plans: that they create a two-tier system with non-magnet schools being perceived as inferior.

The proposed curricula at the Kansas City magnet institutions reads more like that for a university than the average American school.

In addition to a basic academic programme at each one, the schools will cover environmental science, computers, and languages at all levels, law and public service, international studies, health professions, robotics, Greek and Roman studies, and vocational programme to include fibre optics and computer design.

An intensive college preparatory school would enable students above the 50th percentile to graduate with a year of college credit, and the management of one of the schools may be taken over by its teachers as a pilot project in line with the recent Carnegie

Forum report. All these themes, says Professor Levine, have proved successful elsewhere - to which the state retorts that he has merely copied the most popular magnets from other districts.

"They picked a bunch of themes and are forcing them down the throats of the schools and parents," said the assistant attorney-general, Mr Michael Fields, who claims the plan does not have public support.

"They did a couple of surveys that were fairly minimal, and then did not even heed the responses," he added. "There was very little interest in foreign language themes, and they're putting in a lot of foreign languages. There was very little interest in elementary magnets, and yet they plan a whole system of elementary magnets."

Ms Patricia Brannan, a Washington lawyer who is representing the school district, denies the charge. She claims "tremendous public enthusiasm" for the scheme. "There's a hunger out there for some meaningful desegregation," she told the court.

The evidence seems to support Ms Brannan. An initial magnet plan in Kansas City this year, involving six schools, has resulted in packed classrooms and a waiting list of 1,700 students, both black and white.

Kansas City's school population is 74 per cent non-white. The magnet plan, hoping to attract white children away from private schools in the suburbs, lays down that between 50 and 60 per cent of the pupils must be non-white.

Until 1954, Missouri law made segregated schooling mandatory - which is why the state is being held responsible for putting things right. But in 1984, it appears that no one anticipated that Kansas City would go quite so far. Perhaps the words of the song should have been heeded.

Devaluation looms for education degrees

When Mr Gerald Baliles, the new Democratic governor of Virginia, set up a special education commission as his first act in office, he instructed it to be bold. "Hot potatoes and sacred cows are not off limits," he told the panel.

It has taken him at his word. As a result, Virginia may become the first state in America to reject undergraduate degrees in education. From 1992, if state lawmakers agree, new teachers will have to hold degrees in the subjects they intend to teach before they can enter the classroom.

The proposal follows the lines of the recent Carnegie Commission report, which was widely praised when it

appeared but has so far led to little action among the states. It has already attracted criticism from Virginia's teacher-training colleges, who fear the prospect of having to revamp their curricula. Some claim that, without a specific course in education, new teachers will have problems in handling and motivating unruly students.

The commission has also recommended the provision of voluntary schooling for four-year-olds by 1992, a requirement for sixth-graders (11-year-olds) to pass standardized tests in reading, writing and arithmetic next year, and a reduction in class size to 18 by the end of the century.

Union to sue over 'illegal' £338m cuts

BELGIUM

Jane Marshall on the latest battle over spending by the Brussels administration

Tension is mounting in Belgium schools as the first effects of the Government's economy measures begin to bite.

M. Gerard Deprez, the president of the Social Christians, one of the four parties which makes up the ruling coalition, has declared the administration is acting illegally.

And a teachers' federation is suing it for contravention of the Belgian constitution and violation of the Treaty of Rome.

The controversial cuts, finalized in July, were designed to reduce the education budget by 21 billion francs (about £338 million), and are threatening around 6,500 teaching jobs in secondary schools. They provoked widespread teachers' strikes, protests and demonstrations during the summer term.

A prime issue which has emerged since the return to school concerns the Government's calculations of subsidies, teacher-pupil ratios, and the number of teaching hours for secondary schools.

Under the new arrangements, some drastic cuts have been made. At last one school, with a 10 per cent drop in its roll, faces a reduction of 49 per cent in its teaching hours. Particularly threatened are smaller schools, and those in the countryside, which are struggling to keep on offer a minimum of courses in the face of falling pupil numbers.

M. Deprez, who protested in the spring that the planned economies were "too much, and too fast," is now accused of the Government of trying to introduce educational savings which are not only "too severe" but also "illegal".

He demanded that the Government should curtail the measures, which were radically against his wishes to see the rural schools spared. "The safety net has proved to be a quilline," he complained.

Schools are also angered by a new rule which will "lose" about 10,000 pupils across all educational levels. The purposes of calculating subsidies, children of parents not subject to Belgian taxes will each be counted as one-fourth of a unit.

Those youngsters affected include pupils whose parents live or work abroad, and some foreigners, such as those working for the European Community and diplomats accredited to Belgium.

The francophone Federation of Christian Teachers, with support from parents and other teachers' bodies, is taking legal action against the Government at both national and European levels. It accused Brussels of contravening the constitution because, it claimed, some Belgians faced class discrimination against them.

The measures would not only disadvantage those children who were underprivileged, but all those attending school with them.

M. Regis Dehogne, the federation's president, said that "if 20 children constitute a primary class, in certain cases there will have to be 25" because some youngsters there would be counted as only 0.8 of a child. A secondary level, he said, "10 students will be needed for an option, instead of eight."

The federation is also starting proceedings at the EEC Commission against the Government for breaching the Treaty of Rome, which forbids discrimination on grounds of nationality, and lays down the principles of free movement of workers.

Meanwhile, to comply with an earlier European ruling against it, the Government is expected to introduce an examination for entry to higher education. The exam, which takes, is to prevent a flood of students from other European countries coming to study in Belgium.

OVERSEAS

As the vocational debate continues in Britain, Barbara Casassus from Tokyo and Mary Follain in Paris report on technical education successes and failures



Changing classes: more teenagers are opting for training schools

Proving just the job to avoid university

A small but growing number of Japanese 18-year-olds are flouting their society's university-is-everything convention and earning a practical qualification at special training schools (*senjusho*).

These vocational institutions have gained sharply in popularity since they were upgraded from the general category of miscellaneous schools a decade ago.

The proportion of 18-year-olds enrolling for advanced courses at *senjusho* rose to 11.2 per cent at the beginning of this academic year from 2.6 per cent in 1976. For several years now, overall admissions have outstripped those of two-year junior colleges, where about 90 per cent of students are women compared with 60 per cent for the special training schools.

Senjusho gakkos, which have increased from 300 a decade ago to more than 3,000 now and also provide courses for 15-year-old school-leavers, offer both a useful and respectable means of avoiding Japan's education treadmill.

Graduates find ample employment openings and because of the seniority system in companies - pay rises with length of service - their salaries more or less keep up with those of degree holders.

In line with a recommendation from Prime Minister Yasuhiro Nakasone's provisional education reform council, 123 *senjusho* gakkos meeting certain criteria were authorized last April to put their graduates forward for university or junior college entrance. Although between 8,000 and 9,000

students were eligible, only 178 took up the opportunity.

The authorities are, however, concerned about the hard-learned techniques used to attract students to the mostly private schools. An advisory committee to the Education Ministry, headed by a former official, Professor Takeshi Senzaki of the private Rinkyo University, is working on proposals for change in the curriculum and teaching methods, admissions, and the guidance secondary schools should give to prospective students. The committee's next report is due for submission next March.

Until *senjusho* gakkos gained some status by becoming a valuable source of skilled labour, vocational instruction had been the Cinderella of the education system. Specialized high schools have usually taken pupils unable to stand up to Japan's tough academic competition and have been noted for poor teaching standards and low morale. Five-year technical colleges have not fared much better.

By contrast, vocational training in employment, which comes under the auspices of the Labour Ministry, is often described as an important ingredient in Japan's economic success. Also primarily in private-sector hands with support from government, effective vocational training is built into Japan's priority of generalization over specialization - hence the negligible role of postgraduate studies - and system of job rotation.

On yesterday's machines for tomorrow's dole line

FRANCE

The French have a well-established system of early specialization in technical education but are not at all sure they are giving their under-16 under-achievers a fair deal.

Most of the 850,000 pupils in their secondary vocational schools were ejected from general comprehensives at 15, or even 13 - usually because teachers judged them incapable.

Roughly a third of this age group is shunted off unwillingly into the *lycees d'enseignement professionnel*, familiarly known as LEPs, where pupils follow highly specialized courses for specific jobs in industry and the services.

Many will not even be able to choose their speciality because no one school can offer more than a few of the 300 or more courses available nationally. For example, a girl wanting to do hairdressing may well find herself in secretarial classes.

Before the economic crisis hit France, even those who only stayed for three years and emerged with the lowest qualification, the *Certificat d'aptitude professionnelle* (roughly City and Guilds level), were sure of a job. Now many of the targeted jobs they are still being trained for have disappeared altogether, and even those

who take the slightly more theoretical *Brevet d'enseignement professionnel* two or more years later often join them at the unemployment office.

Even so, they stand a better chance than the thousands who leave the education system without any qualification at all. And they will still be sure of a job if they are lucky enough to get a place in a well-run school like the LEP Belliard in the north of Paris, which specializes in catering.

There are 1,351 LEPs altogether, offering some 300 courses leading to the lowest *Certificat*, and about 70 to the *Brevet*. They train bricklayers, plumbers, painters, carpenters, technicians and electricians. About 12 of the 37 hours of classes a week are reserved for general education.

The schools frequently get a bad press, and morale in most is very low. It is not helped by teachers like the one who welcomed Mme Michèle Alliot-Marie, the education junior minister, and local dignitaries into his class last month, saying the knew schools like his are often called "educational dustbins". His pupils do not need to be told

they are right at the bottom of the technical education pyramid, or that technical studies as a whole are widely seen as inferior to the general streams. This is despite some spectacular French achievements in technology and the prestige of the *grandes écoles* - the engineering schools at the top of the system.

Since the late 1960s, LEPs have been siphoning off low achievers from general stream lower secondary schools. Once there, few manage to return, although it is theoretically possible. And only the brightest move on to a technical *lycée* (upper secondary) where they could take a technical *baccalauréat* and perhaps even try for a place in a technical university.

Last year, as part of a five-year plan to raise technical qualifications, the then socialist Education Ministry introduced five new vocational *baccalauréats* for the LEPs.

Closely co-ordinated with industry's needs, they are intended to lead straight into a job and on to further education, although this is not excluded, and are geared to jobs in such areas as information technology, automation processes and domestic appliances services.

The Education Minister, M René Monory, is expected to launch a further batch shortly. Ten of these new *bacs* are now on offer in 150 LEPs, which have been given the new title of *lycees professionnels*. Critics maintain that calling the new diplomas "baccalauréats" will do nothing to help technical education's poor image and will only downgrade the Napoleonic original. But they have brought hope to some LEP pupils.

Although the French system is unique, M Monory faces the same problems as those in other developed countries. Apart from the expense, high centralization makes it difficult to move quickly and adapt courses to local or industrial needs. The Ministry is said to own a quarter of the machine tools in France, but many are obsolete. M Monory has insufficient funds to retrain teachers and cannot sack those whose skills are no longer needed because they are public servants.

At present, some 30 courses are being dismantled but many more need to go. The minister is a former apprentice and industrialist himself, and the LEPs are counting on his help.



New face, old ways: a technical lycée

Blocks on the road to safety

WEST GERMANY

Elizabeth Huddy discovers how the Federal Republic is tackling the enormous toll of child cycling accidents

Accidents on the road and at home continue to be a major threat to children's safety in West Germany. Every year, 50,000 youngsters aged 15 and under are involved in traffic accidents, hundreds die and thousands are maimed for life.

Ministers of education in the 11 federal states were first jolted into action back in 1970 when the number of child fatalities reached a peak of 2,167, with more than 72,400 injured. The figure declined by 1984 to 563 deaths in 48,483 accidents involving children, of which 16,272 were pedestrians, 17,049 cyclists. Boys outnumbered girls two to one.

Recommendations on the inclusion of road safety education in all school curricula were issued in 1972. These have been widely adopted by the federal states in both primary and middle schools.

Emphasis is on teaching six- to 10-year-olds how to react in traffic and the correct way to ride a bike. Obstacle courses are set up in school playgrounds with the help of local police officers. More than 90 per cent of primary children take a cycling proficiency test in the final year. More than 30 per cent of all children killed in road accidents are cyclists and the average age of victims is

proceedings and the training of high-way patrols to guide younger pupils safely across zebra crossings.

Fourteen to 15-year-olds can take part in 40-hour courses on handling mopeds and motorized bikes.

Although road safety has become one of the most popular subjects in many schools, some teachers complain they have difficulty fitting it into a tight syllabus and lack both motivation and adequate training.

Herr A.H. Hammelrath, the chairman of the main teachers' trade union, is still far from satisfied with the efforts being made to reduce West Germany's dismal record of road accidents involving children.

Eighty per cent of all the accidents take place on the way to school or in urban areas where the speed limit is 37 mph or, in some cases, even 19 mph.

Speeding and aggressive driving among West Germany's more than 30 million car owners are all too prevalent. There are also few playgrounds in urban areas, and half-day schooling means the children, with working parents, lack supervision and are frequently left to their own devices. Many children collide with cars while playing on roads only 500 yards from their homes.

CENTRE Français FRANCE '87 THE YOUNG CONNECTION

THE FRENCH CENTRE:

- SPECIALISTS OF FRANCE
- SPORTING HOLIDAYS
- IN LONDON
- SKIING
- EDUCATIONAL TOURS
- A LA CARTE
- LANGUAGE COURSES
- TRAVEL

RECOGNISED BY THE FRENCH GOVERNMENT

For the brochure call 01-221 8134 or clip coupon

Name _____
School _____
Address _____

Telephone _____

THE FRENCH CENTRE

Chepstow Lodge, 61/69 Chepstow Place, London W2 4TR

LETTERS

Expenses spared

Sir - Oh, golly! I am so looking forward to my GCSE Phase IV INSET day!

The Midland Examining Group has very kindly arranged to look after me for the whole of Saturday, October 4, so I won't have to spend the day relaxing with my family. What's more they've even generously offered to pay me 7p per mile towards my travelling expenses in attending the meeting!

I sympathize with their difficulties in supplying me with a meal or reimbursing my lunchtime expenses, and I quite understand their inability to pay me parking fees. No doubt parking will be quite easy and cheap in the centre of Bristol on a Saturday morning.

Isn't it nice to feel so confident that the teaching profession is being fully supported in the introduction of this important new examination?

R C JERMY
The Brush
Foxmoor
Stroud
Glos

No credit given

Sir - I read with interest the article by Peter Burke of the Southern Examining Group about the GCSE exam (TES, September 26).

It is comforting to note that the group is hoping to save itself money by its proposed scheme of "accrediting" teachers as autonomous planners, implementers and assessors of the new exam. I have looked in vain, however, for a reference to any extra money.

Instead, we are told that the scheme is a recognition of our professionalism. Isn't it time that someone defined the term so that it means the same when referring to teachers as when referring to doctors and lawyers?

JANET E JENNINGS
Head of English
St Albans Girls' School
Herts

Deaf and blind to dangers of audio-visual equipment

Sir - That there are physical dangers associated with audio-visual equipment has long been recognized. However, from your report (TES, September 12) it does appear that recent comments by the Educational Foundation for Visual Aids could be seriously misleading.

It would be wrong to assume that the use of new equipment, satisfying all the latest regulations, is necessarily free from danger or that electricity is the only hazard. The method and location of use and the adequacy of maintenance are at least as important as equipment design - death has resulted from a falling television receiver.

Even more serious perhaps is the repetition of the common fallacy that lack of money is the principal cause of such dangers.

It has always been the case that the selection, acquisition, operation, and maintenance of audio-visual equipment have received much less than adequate attention from educationists.

Safety improved

Sir - Our experiences in school science laboratories makes us more optimistic about the safety of mains-operated equipment than the Educational Foundation for Visual Aids whose experiences with audiovisual equipment you report.

Three of our reasons for optimism are:

- Aided by bodies such as ourselves



Out of touch: AV hazards

even in local education authorities with expenditures above average.

Only by inexplicable good luck has there been a low incidence of serious injury and death. There is no reason to believe that this good luck will continue indefinitely.

Educationally the price has been very high. Not only has little been done to develop the ability to learn from the

audio-visual media but the bad example this presented to the young has, understandably, been taken by some of them as further proof of education's being out of touch with the real world.

Your report's allusion to the need for organization beyond that which can be provided by a contractor is pertinent. No contractor can replace the educationist-led and educationally based, technical and administrative section which every I.C.A. requires to manage the provision and use of facilities for audio-visual communication.

The "faulty electrics" to which you refer, while serious, are only a small manifestation of a philosophy of education whose inadequacy permits neglect of audio-visual communication and entrusts too many decisions to persons lacking the necessary expertise.

ERIC ANDERSON
38 Freshfield Road
Formby
Merseyside

learn to maintain mains cables and plugs whose condition causes the EFA concern.

However, our optimism is tempered by the knowledge that lack of resources is preventing these developments having their full effect.

D A TAWNEY
Director
School Science Service
Brunel University
Uxbridge
Middlesex

Separate assembly

Sir - May I be allowed to respond to your remarks on the recommendation of the Parliamentary Select Committee on Education that Christianity should remain central to religious education in schools and the school assembly?

The all-party committee was unanimous in all its recommendations, including this one, but we were not unmindful of other religions being practised in our country - some of them on a substantial scale.

We feel that the "opt out" clause under which pupils of faiths other than Christian can attend an alternative assembly based upon their own religion is the best way to meet the rights and sensitivities of all concerned with this issue. By this means, children from all groups will continue to have a chance of understanding the culture under which our whole civilization has been built.

HARRY GREENWAY MP
House of Commons
London SW1

Christian nurture

Sir - As one working in a Church of England aided school, may I comment on the statement made by the Bishop of Durham during his interview with Bert Lodge (TES, September 19).

I admire the vision shown by Dr Jenkins in his stimulating approach to theology. At last - a bishop of some academic stature has sent us back to our theological drawing boards. That was disappointed when he mumbled the out-of-date platitudes in his criticism of Church schools.

I would just single out one thing. He raised questions about the endorsement of "any form of particular religious education". Whereas it is true that many parents expect a degree of Christian nurture in a Church school, it is also true that the Christian school is often the standard-bearer for Religious Education itself. With less and less emphasis on the place of religion in life in schools here are a group of schools committed to the open investigation of that for which the bishop appears to care.

If being interested in religion makes one divisive, so be it.

It is no surprise that all Christian denominations can find a home in Church of England schools; equally, it should be no surprise that believers in other faiths may come to a Christian school because they believe the religious quest is worthwhile.

I am prepared to update my theology at the bishop's behest. I would like to think that Dr Jenkins was equally willing to bring his thinking on Church schools up to date.

ROY A R WEBB
3 Crown Street
Bury St Edmunds, Suffolk



Elitism v breadth

Sir - In "Comment" (TES, September 19), you forecast that Mr Kenneth Baker will shortly announce the introduction of model elite schools in the major cities. These may be the so-called "Crown" schools, directly administered by the Department of Education and Science with HM Inspectorate-drafted criteria or schools with a science and technology orientation based on trusts and DES per capita grants.

But there is a *non sequitur* here. The DES has long canvassed the urgent need to ensure that all schools adopt a broad and balanced curriculum, covering the expressive arts and aesthetic activities just as much as the vocational

and technological aspects of education. Again, HMI has argued that all children must encounter - at all stages of their education - nine areas of experience spread right across the curriculum.

Surely, these new elite schools must have a "model" curriculum? Any focus on a narrow area of the curriculum would be seen as a snub to the DES and HMI and could only lead to rejection of grant-aid. The curriculum for these new schools is of more than passing interest to us all.

NIGEL PROCTOR
Didsbury School of Education
Manchester Polytechnic
799 Wilmslow Road
Manchester 20

No oversight

Sir - While it was pleasing to see the extensive coverage given to the Liberal Assembly proceedings on education (TES, September 26) I would like to correct one false impression that may have arisen as a result.

It is true that the motion passed does not include policies on special education and I accept that, given the comprehensive nature of the resolution, this may look like an oversight. However, your readers may be interested to know that the Liberal Party is already committed to funding the integration of children with special needs and to strengthening their rights.

The motion passed last year at

Dundee called for, among other things, "adequate funding by central government to enable local education authorities to provide for those special education needs as stipulated in the 1981 Education Act".

In addition, I shall be moving several amendments to the current Education Bill in an attempt to tighten up the provisions for older children and for apprentices as well as the new, controversial provisions for teacher training for integrated education.

CLEMENT FREUD MP
House of Commons
London WC2

Bait that stops special schools going under

Sir - Your front page article, "Special school staff may lose extra payment" (September 19) did not come as a surprise, since I was one of the delegates at the conference at which Mr Gates had spoke. I can, however, verify the gasps of horror and looks of disbelief, from the hundred or so delegates from all fields of special education, when he hinted that consideration would be given to scrapping the special schools allowance when talks on the Coventry agreement resume.

Having spent the first eight years of my career teaching PE in three secondary schools, and the past 15 years in special education - the first two in an approved school and the remainder in two emotional and behavioural difficulties schools, the past seven as headteacher - I would like to enlighten some of the employers and some union leaders, on the minor contrasts in these three areas.

As a PE teacher, I never seemed to have any problem with discipline, and consequently stress, since a quick slipper on the backside seemed sufficient and acceptable to both pupil and parent. On my transition to an approved school, this and other minor methods of discipline suddenly did not work, and one had to learn how to take verbal abuse and deal with threats and acts of violence, so much so that I could willingly have slept for a month at the end of my first term.

Now as a head with a lot of experience, I find myself having to train new staff to cope with similar sorts of

experiences that I encountered - some manage; other good teachers fail. Understandably, they refuse to take the abuse and threats, even though tolerance, patience and perseverance usually pay dividends in the forming of relationships with the most difficult of pupils.

When teaching vacancies have arisen at my school over the past seven years, I have never received more than three applications for either IS or 2S posts. This term, for the first time, I have been able to advertise for a 3S post plus extraneous duties allowance within the authority - and I have received one outside application. What chance of recruitment will our schools stand in future, if there is no "bait to dangle"?

I know that I speak for colleagues in other fields of special education, who regularly encounter situations which I myself could not face, such as teachers of severe learning difficulties children, who too often have to overcome the emotional stress of children dying.

Perhaps those employers and union leaders who feel that the SSA is now not necessary, would be best advised to spend a month or so in a special school - preferably teaching - before they arrive at a decision. The danger of this, however, might be that they may want to double or treble the SSA and even suggest a bigger staff/pupil ratio.

H PARTINGTON
Summerset Residential School
Rimmsbottom
Bury

Heads' burdens

Sir - J S Marsden's letter (TES, September 12) does seem to highlight the misapprehension teachers have about the duties and responsibilities of headteachers.

Although the points Marsden makes have some validity, the head of a department, however large, is only responsible for part of the curriculum no matter how many pupils, and in the case of subject speciality there is no responsibility for the pastoral care of children.

Headteachers do not have to attend parents' evenings; they actually arrange them and run them at their discretion and, of course, heads have

other responsibilities. Responsibilities for non-teaching staff, canteens, cleaners, for the fabric of the building, to the governors and the public at large, and for hiring and firing.

It would seem to me that no matter how large a department, the limited amount of responsibility, however onerous, can never match the absolute responsibility for all that goes on in a school vested in headteachers. A pay differential of 2 per cent seems poor recompense for such a burden.

DAVID L HUGHES
Headteacher
Crich School
Frome
Somerset

Industrial design

Sir - Rick Rogers' feature, "Two for the road" (TES, August 29), could not have been a better justification for encouraging more design and technology teaching in schools. How disappointing, then, that he had to report such ill-informed notions that design and technology is "too theoretical, less focused and practical".

If the head of industrial design at Lancaster Polytechnic only looks at the CDT syllabus on offer he would see that in most of them the practical requirements amount to about 50 per cent of the course. As for being less focused; it is hard to imagine how the "ideal subjects" of maths and physics can focus on industrial design skills more effectively than design and technology.

To round off the comments about qualifications for industrial design courses it is suggested that design and technology could be offered as a third



Design notions: ill-informed

A level, provided "the school has a good qualified teacher in this subject". Are we supposed to infer that nobody worries how the acceptable A levels are taught, but just try offering design and technology, and your teacher's credentials may well be looked into?

If those responsible for design in higher education looked more carefully at the CDT syllabus and gave the positive encouragement where the subject is taught well, the shortage of good industrial designers might not be so great.

D SIMON SMITH
Head of CDT
Coffe's School
Horn Park Lane
London E912

The Salisbury Review
Editor ROGER SCRUTON
for outspoken, critical
analyses of current
educational problems
Quarterly Annual sub: £12
Outside the UK add £5 p.a.
Write to: The Review, 10, St John's Lane, London EC1A 4JN

Dyslexia debate

Sir - It will be obvious from our address that we are not neutral in the arguments concerning "dyslexia". However, one cannot allow such misleading and untrue statements as appear in Dr Woolfson's article "Dyslexia, the middle-class prerogative" (TES, September 19) to stand.

He comments that "Experimental results do not support this assumption" (that IQ correlates with reading). Actually they do! Demographic studies show a correlation of around 0.60 between reading and IQ. The whole point of diagnosis is the discrepancy between expected reading and observed reading attainment.

If one used the definition of dyslexia (1968, and now dated) given by Crichtley, i.e. "definition by exclusion", it would be difficult to include children whose learning difficulties were due to adverse environmental factors. Current diagnostic criteria involve more positive features, as Woolfson outlined briefly in the article.

In practice, both Aston and Bangor criteria, along with other tests, are used by psychologists assessing dyslexia in our experience. Here the same child would be "diagnosed" as dyslexic or having a specific learning difficulty. Assessment procedures are really quite standardized.

It is also absolute nonsense to say that the human brain has one half for language, and the other for movement. "Movement" involves both hemispheres (eg the motor strip in both sides of the cerebral cortex).

Forget the labels

Sir - I would draw the attention of your readers to the newly established Royal Society of Arts diploma for teachers of children with specific learning difficulties. Piloted in 1985-86, the diploma has now received the approval of the Department of Education and Science.

Gillian Thomas in her article on the British Dyslexia Association diploma (TES, September 19) is certainly right when she states that teacher training in this area of education has remained at a very low level, both in college of education and in-service training. That is why the RSA specific learning difficulties diploma is so important to



Right reading: learning difficulties are now recognized

Anyways, such simple theories as lack of cerebral dominance, or faulty eye movements, are hotly contested as causes of dyslexia.

It is simply not true that "Every teaching technique suitable for the dyslexic non-readers is suitable for non-dyslexic non-readers". Research evidence shows clearly that the use of tracing, or kinesthetic memory techniques to help learn spelling patterns helps dyslexics but not other non-readers.

To dismiss the concept of dyslexia, as Woolfson advocates, is irresponsible. Central government saw fit to pass the 1981 Education Act in which the concept of dyslexic or specific

teachers throughout the country in local education authorities schools.

When the RSA officially launched the diploma in June, at the conclusion of the pilot year, the theme of the conference was "action for under-achievers". The speakers were less concerned with labels (dyslexia/specific learning difficulties) than with those children who underfunction through the years of compulsory education - and often throughout life.

Dr Richard Woolfson said in the same TES issue: "Every teaching technique suitable for dyslexic non-reader is suitable for the non-dyslexic non-reader".

I have just completed the first RSA special learning difficulties diploma

learning difficulties is now recognized. Active steps are being taken by many authorities throughout the country to try to help this sizeable minority of troubled children.

The private sector, at its best, has always been an innovative force and must rightly take some of the credit for the successes which have been achieved in this complex area of special needs.

D R M E THOMSON and
D J WATKINS
Joint Principals
East Court School for Dyslexics
Victoria Parade
Ramsgate, Kent

course and, as an experienced remedial teacher and adult literacy tutor, would strongly endorse Dr Woolfson's statement. Good remedial techniques should not be confined to the labelled few - we must ensure that they are more widely practised.

The RSA diploma, successfully piloted in Harrow, Hertfordshire and Worcestershire and shortly to be available in local education authorities colleges throughout the country, makes that more possible.

JACQUELINE FERMAN
Piensaans Ridge
Berry Lane
Charleywood
Herts

Population hoax

Sir - Let me assure Philip Meredith (TES, September 12) that I did not take the views presented in *The Great Population Hoax* at face value. As the author of a study of the American right, I am fully familiar with the attacks which have been launched on the International Planned Parenthood Federation and its national affiliates.

I thought that I had made the pedigree of the video clear and certainly had no wish to mask "The Responsible Society's" mentality, objectives or methods, with which I have no sympathy.

However, I did think that it would be helpful for readers to know what was in the video rather than dismissing it as simply another manifestation of the conspiracy theory about population control, eugenics and sexuality.

One of the interesting aspects of *The Great Population Hoax*, it seemed to me, was the way in which it used demographic arguments, historical material and commentary from individuals such as Lord Bauer and Julian Simon to make controversial points which apparently contradicted received wisdom.

Each of these arguments taken separately could be discussed rationally.

Abortion law

Sir - Miss Madeleine Simms (TES, September 12) is quite right, that in the campaign for abortion in the 1960s a principal issue was that abortion should be "no business of judges, policemen or priests" and that this "nowadays incorporated in the slogan 'A Woman's Right to Choose'".

She is also right that "we had not formulated it in quite those terms 20 years ago". In fact, precisely the opposite, since on page 188 of her book *Abortion Law Reformed* (1971) Miss Simms records that in April 1967

ly. What the video has done, however, is to weave them into a seamless web, which those who made it think points in the direction of opposition to population control.

However, the attempt to blacken the idea of family planning by associating it with eugenics and racial superiority doctrines is sufficiently crude to cast doubt on the way earlier arguments are used, just as the last part of the video - which deals broadly with sex education - makes the whole purpose of the enterprise clear.

Thus, while I agree with Mr Meredith that some of the material used in the video is misleading to say the least, I think that it is important for teachers to familiarize themselves with the kinds of arguments which are now being deployed by groups such as "The Responsible Society" as well as with their techniques.

The critical dissection of a video like this in a classroom context ought to stimulate discussion about a range of ethical issues as well as about propaganda.

It would be a pity therefore if those using the video thought that all the arguments in it were as easy to rebut as the one linking voluntary family planning with Nazism.

GILLIAN PEELE
Fellow and tutor in politics
Lady Margaret Hall
Oxford

tion Law Reform Association Parliamentary Lobby (organizer) wrote to 35 sympathetic colonists asking for their personal co-operation in correcting the impression put about by opponents that the Bill allowed abortion on demand.

Dr C B GOODHART
Gonville and Caius College
Cambridge

Letters should be as brief as possible and typed on one side of the page only. The Editor reserves the right to amend or cut letters where necessary.

Lack of architects

Sir - From time to time your columns have commented on architectural education and drawn attention to proposals for cuts in the number of both polytechnic and university departments of architecture. I have just seen 33 advertisements for architects of all grades published by the RIBA Appointments Bureau, in the *Building Design* newspaper. It would seem that the lack of support for its educational system by the Royal Institute of British Architects does not logically fit the findings of its own appointments bureau for if its advertisements are correct, more places in architectural departments are needed to meet the demand.

J P FORD
28 Redhill Lodge Drive
Arnold, Nottingham

Courses

DEGREES & GCE

Guided Home Study Courses for
London University:
BSc Econ, LLB,
BA (English), BD, Dip Ed.
Warwick University: MBA
Professional Examinations:
Law Soc., Inst. M, Inst. Ex,
AAT, IOB, HCIMA,
GCE: O & A level
Effective Thinking:
Course by Edward de Bono

For free prospectus write stating
exam of interest to:
The Registrar,
Dept. BBS, Wolsey Hall,
Oxford OX2 6PR.
Tel: (0865) 52200 (24 hours).

Wolsey Hall Oxford

FREE PENGUINS

Take out a year's subscription to the TES and you can choose free Penguin books from our literary editor's Penguin choice. A selection that ranges from Jane Austen to Tom Wolfe. Choose any two titles from the selection of six. Or choose one from each.

CHOOSE ANY 2 TITLES

- 1 The Penguin Complete Novels of Jane Austen
- 2 The Discoverers 'Daniel I Boorstein'
- 3 The Purple Decades 'Tom Wolfe'
- 4 The Pelican History of the U.S.A. 'Hugh Brown'

OR CHOOSE ANY 3 TITLES

- 5 The Definitive Biography of Nikita 'Richard Buxton'
- 6 'Lolita' Vladimir Nabokov
- 7 The Sailor Who Fell From Grace 'Yukio Mishima'
- 8 The Member of the Wedding 'Carson McCullers'
- 9 A Good Man In Africa 'William Boyd'
- 10 Slow Boats to China 'Gavin Young'

OR CHOOSE ONE FROM EACH SELECTION

Please send me a year's subscription to the Times Educational Supplement at £30 plus my free Penguins.

Name _____

Address _____

My choice of books is _____ (enter numbers here)

a) I enclose my cheque for £30 made payable to The Times Supplement

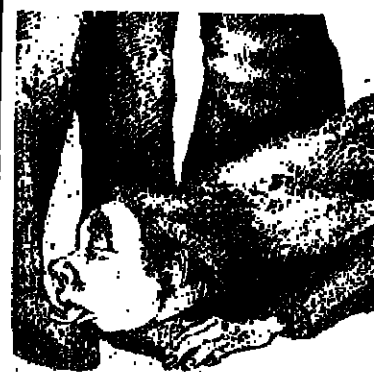
b) Please charge my credit card. Signed _____

Card No. _____

Please send this coupon together with your payment to: The Times Educational Supplement, Priority Mail, 31 John's Lane, London EC4A 3DF. This offer is available until 31st October 1986 only and closes on 31st December 1986.

THE TIMES Educational Supplement

What you wanted to know about promotion



Upwardly mobile teachers face the battle of the bulge, the queue of colleagues in their late thirties waiting for others to get on – or get out, Sarah Farley reports. But there are signs that competition for the top jobs is not as fierce as expected.

Peter Earley, who is studying teachers' careers patterns at the National Foundation for Educational Research, says: "Head teachers often tell me they have just lost half-a-dozen of their best staff, so there is obviously movement in teachers' appointments."

But who is going, where and at what rate? Those questions are all of interest to teachers casting an anxious eye at the next rung of the ladder, especially if they are on Scale 2 and aged 35 to 39.

For there are 77,106 teachers in this age group, 40 per cent of them creating the biggest Scale 2 bottleneck ever. And looking up at this huge obstacle is the smallest-ever recorded proportion of Scale 1 teachers. Though 96 per cent of the under-25s are on this scale, there were only 14,614 of them in 1985 according to the latest Department of Education and Science figures.

So what are the chances for teachers in their twenties or those who have gained experience, achieved Scale 2 and are looking at the prospects for the next 10 years of their working lives? Are they destined to be frustrated by the crowd of men and women not much older filling all the senior posts?

The bulge of 35 to 39-year-olds can be seen in higher up posts too: they are the largest age group on Scale 3 in secondary schools, and in primaries there are more deputy heads of this age than any other.

Promotion for these, and therefore those below them, clearly depends on the rates that others get on – or get out.

At the apex of the promotions pyramid are headteachers. Not surprisingly, in both primary and secondary sectors, most teachers promoted to headships had previously been deputies; in 1981-82, 1,325 deputy heads got their own schools compared with 327 from other grades.

But those wondering if a headship is on the cards for them have to contend with a number of jokers in the pack. How quickly schools are reorganized and closed as school rolls fall and the rate at which present incumbents take early retirement are just two.

The DES hazarded a series of guesses in 1984. "Numbers of promotions to primary school headships are projected to decline considerably between 1980 and 1985 but then rise to a level of about 1,000 a year in the late 1980s and early 1990s."

"In the secondary schools, the numbers of promotions are projected to fall to about 250 a year in the mid and late 1980s, but then rise to about 350 a year in the early 1990s." Unless there are deliberate moves to increase or decrease the numbers of senior posts in schools, the opportunities for deputy headships and the like will probably follow the pattern of headships.

The actual numbers of senior posts falling vacant – and the competition to fill them – depends largely on whether the rate of early retirements continues to rise, and on how many younger teachers also leave the profession.

In the 10 years to 1985, the largest groups of teachers leaving the classroom before retirement were the under-35s. But in the same period, there has been a dramatic growth in the numbers of older teachers taking early retirement; the proportion of 55 to 59-year-olds leaving the profession has trebled.

One official source suggests that in 1984-85, while 4,266 teachers (including further education) went at retirement age, 10,712 took retirement prematurely. For both men and women, 55 was the age most teachers chose to retire. And there is some evidence of higher rates of attrition (or is it better pension prospects?) among heads.

When one authority announced an early retirement scheme, a third of its secondary heads applied.

Overall, however, the percentage of all teachers leaving the profession before 60 appears

to have remained constant at about nine or ten per cent for women and five or six per cent for men over the past decade. The increased rate of early retirement has been offset to some extent by the decreased tendency for younger teachers, particularly women of child-bearing age, to leave the profession (see graph).

It is too early for any sign in official figures of the much-talked-of flight from the classroom of disgruntled teachers, in the wake of the industrial action.

But there are some signs that – despite plummeting school rolls, which ought to mean prospects for promotion are also falling – opportunities for advancement are actually increasing at the moment. And there is some evidence as well that competition for the top jobs is not as fierce as might be expected.

One survey found the 314 secondary headships were advertised in 1985; 48 of them were subsequently re-advertised – presumably because of insufficient response from good candidates. Vacancies were 13 per cent up on a similar survey the previous year and the rate of re-advertisement was up over 50 per cent up.

The Inner London Education Authority has taken to advertising primary headships nationally to attract more candidates and had to re-advertise five out of nine vacancies for secondary headships last year. A quarter of the headships in outer London boroughs were re-advertised, two thirds of the re-advertisements appearing more than once. And even rural areas reported fewer applicants and more re-advertisements.

In all other grades, too, the demand seems brisk. Over the last two years, though the effect of falling rolls was increasingly felt in secondary schools, and continued in primaries, advertisements for all teachers' jobs increased substantially. Last year, there was a 25 per cent increase in TES advertisements for teaching jobs and this year the volume has grown again by an estimated 20 per cent.

The ambitious often feel they need to spread their net wider and be prepared to move for a job. In fact, most headships go to candidates from within an authority, though whether this is the result of inside advantage or just that candidates are more likely to apply for local jobs is not clear.

There is proportionately more movement among teachers looking for secondary headships. In 1981-82, 126 teachers obtained secondary headships outside their authority compared with 190 within. At the primary level, 207 heads were appointed from outside but five times as many (1,129) were promoted within their authority.

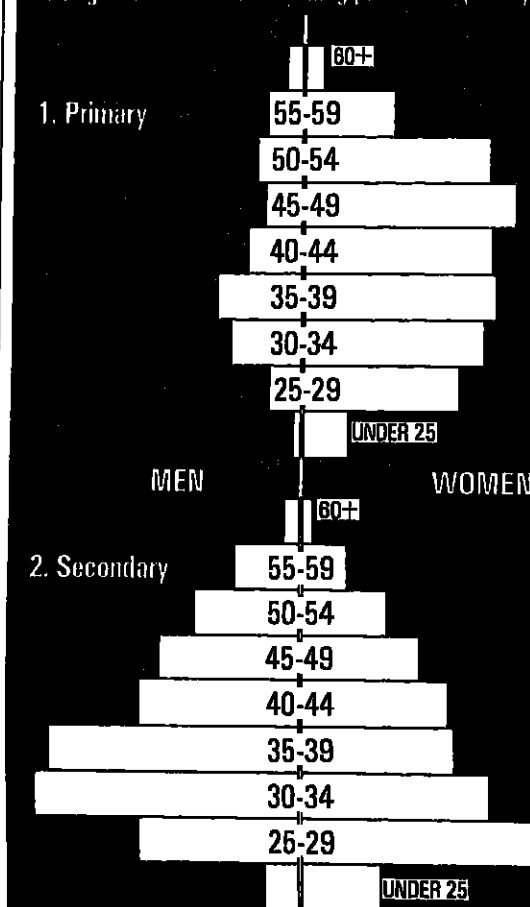
This difference may be the result of local advertising or related to the higher proportion of women teachers in primary schools. Peter Earley says: "As women tend to be more constrained by family ties, they are usually less keen to move their work far from home."

But with limited numbers of senior posts to apply for at the top of the pyramid, if you are willing and able to move there are more jobs to apply for. However, Peter Earley warns: "If you move to the south-east, you would need a good promotion to offset the higher cost of living and housing."

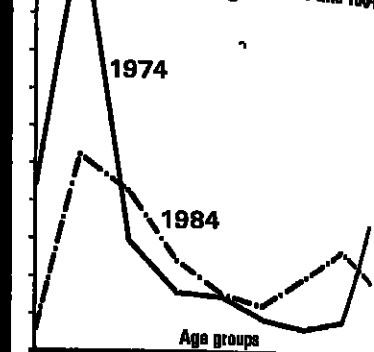
In the primary sector, men (24 per cent of the teachers aged 30 and over) take 56 per cent of the headships; in the secondary sector, (where 58 per cent of the teachers aged 35 and over are men) they take 84 per cent of the headships. The ratio of men to women heads in mixed secondary schools was 13:1 in 1977; by 1983 it had reduced to 10:1.

The smaller figure for women heads is the result of fewer women applying for the jobs, according to Geoffrey Partington (TES, August 22). "Virtually all local education authorities in England and Wales report very much higher numbers of applications for headships and deputy headships from men than from women and claim to appoint a higher proportion of women than

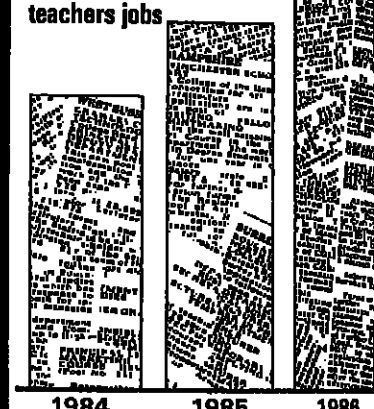
The middle age spread: the age structure of the teaching profession (1984).



Rate at which women left teaching in 1974 and 1984



Growth in volume of advertising for teachers jobs



men applicants who fulfil basic criteria for such posts."

Geoffrey Partington refers to research into career patterns of 431 headteachers, part of which compared men with women, some of whom took a break to have their own children, and others who did not. He finds that "the advantage for men is greater in primary schools than secondary schools."

The mean time to headship for men in primary schools was found to be 14.5 years; for women without children, 18.2 years; and women with children, 20.8 years. In secondary schools, the mean time was 17.5 years for men; 19.8 years for women without children; and 21.8 years for women with children.

The subject taught plays a part in promotion prospects, especially at the secondary level. "You have only to look at the job adverts in *The TES* to see which subjects are in demand," said Peter Earley. "If a headteacher has two equally suitable applicants for a deputy headship – one from the history department and one from the business studies department – the chances are that the business studies teacher will be appointed because that leaves the way open for another teacher in that department."

"Business studies, along with maths, science, and CDT, are the subjects for which there is a shortage of teachers and pressure on schools to expand the departments. English, humanities, PE – they are oversubscribed. But modern languages is becoming a more difficult area for recruitment and therefore promotion prospects are improving."

It ought to be possible to show statistically whether one subject area or another is more likely to result in headship. Colin Morgan, who directed the POST project which looked into the appointment of head teachers, says he can find no research on this. But there appeared to be bias towards arts candidates when he was observing secondary head appointments in the early 1980s. This impression is reinforced by that given by the qualifications of existing secondary heads published in education directories.

Of course, not everyone wants to climb to the dizzy heights. Many are content to do the job they do, as long as the money is right and there is a fair amount of stimulation and activity in the school. Good teacher appraisal schemes could both enhance a current job and improve career possibilities.

The most significant effect of the Coventry pay and conditions deal on teachers' prospects is probably the sweeping away of the frustrating Scale 1, 2 and 3 hurdles. These would be replaced by the single Main Professional Grade with yearly increments which, many make staying in the classroom a more attractive proposition.

There are also a number of new jobs appearing

in schools, in the guise of co-ordinator for this special responsibility for that. "Low-attaining pupils" programmes are an area that seems to offer new responsibilities for English and humanities teachers. Or it might be staff training co-ordinator. Such posts are usually Scale 3a and headteachers are encouraged by TRIST to INSET funding.

The front runner in the co-ordinator stakes is the Technical and Vocational Education Initiative. Patricia Sikes, its evaluator with the Open University, and secondment tutor at the University of Leeds, believes there is much scope for advancement in becoming a school's TVEI co-ordinator. "Teachers with an entrepreneurial streak can often benefit from being involved with TVEI," she said.

"Not only does it upgrade them to what is usually at least a Scale 4 post, but it also gives them the opportunity to apply for TVEI or ordinator posts in other schools. There is also a chance of becoming a local TVEI scheme co-ordinator, either on secondment or as a fixed contract, for five years. These posts carry the equivalent of headteacher scales, so for teachers who want a change from headships, or prefer to become a head, they really offer a good alternative."

Some teachers move out of teaching in school to become lecturers in colleges of further education. Here again, market forces dictate an easier move for teachers in business, science and technology and technology subjects, especially information technology. A stint in industry or commerce is usually a necessary qualification.

The Manpower Services Commission's Youth Training Scheme has increased the demand for teachers but the fixed contracts are a disincentive to many.

Another move out of teaching is into the local advisory and national inspectorate services. David Whitbread, under-secretary for education at the Association of County Councils, commented: "As there are only 475 HMIs altogether, most teachers set their sights at the local service. But the chances are still slim. In a typical county, there are, say, 8,000 teachers with perhaps 20 advisers."

"There is the possibility of becoming an advisory teacher, on the equivalent of Scale 4. These posts are usually for subjects such as PE or music in the primary sector, and for subjects which have not yet been built up in secondary schools, such as information technology. It is a very wide avenue in itself, but virtually all recruits to the inspectorate are from teaching and advisory teaching."

At least teachers know who the competition is

... but didn't like to ask



Have you got the strategy for success? Nick Baker probes the secretive and arcane world of applications, references and interviews

Teacher's promotion is a thorny subject. While many schools have an active staff development programme, the subject of promotion – and the minefield that has to be crossed to get it – remains clouded in mystery.

Is there favouritism or even corruption? Is the helpful teacher serving you coffee in the staff-room, just before you go in to be interviewed, making secret notes about your "off-duty" behaviour? Are there questions that you shouldn't answer at interview? It's sometimes hard to get answers to questions like these, in an atmosphere where cards are played close to chests, axes ground to razor sharpness, backs are vulnerable to being put out – or even stabbed.

With this atmosphere in mind I consulted a panel of experienced – but necessarily anonymous – interviewers of staff to answer hitherto unaskable questions. They included a recently retired head of a large London comprehensive, the head of a large comprehensive in the south Midlands, a governor with experience of appointments interviews over ten years, and the deputy headmistress of a large comprehensive in the Home Counties.

Should I ask to see the reference my head writes about me in support of a job application?

By and large, you should ask to discuss the reference – before it's written. In this way you can bring the head up to date about what you've been doing in the school, and find out what sort of thing he or she shows to you: some will, some won't. Sometimes a very short reference will imply that the head hasn't got a lot of good things to say about you. Look out for euphemism. "Mr Smith is usually punctual" will inevitably be taken as "Mr Smith is a lousy timekeeper."

Do heads deliberately tarnish the image of a teacher they'd like to keep, or overpraise one they'd like to get rid of?

Only one of our panel admitted to having practised the overpraise technique, and then only once. He points out that heads are unlikely to do this about candidates applying for jobs within the same borough as their existing school – for fear of a comeback from a close colleague. Deliberate tarnishing is far less likely to happen. Heads are genuinely interested in their staff's career development, and enjoy basking in the reflected glory of a "star" who gets promoted away from his or her school.

The general consensus among panel members was that exaggeratedly good or poor references are written for devious purposes, but rarely. Staffroom rumour – often flavoured with sour grapes – overestimates the extent to which this goes on.

Do heads exchange information about candidates over the phone?

Yes. One head says that he makes it a rule. Sometimes, particularly in May, it's simply a matter of speeding the reference procedure up, and it's agreed that heads are more frank and to the point over the phone, so there's an added reason for applicants to apply as early as possible. Other heads will only refer to "If there is anything I can help you with concerning this

applicant, please get in touch." This apparent courtesy can be taken to mean: "Give me a ring and I'll tell you things about the candidate that I'm unwilling to commit to paper."

I am going to an interview and will be spending the whole day at the school. During the time I'm not actually in the interview room, will I be observed or subtly questioned?

Yes. Don't be fooled by apparently "relaxed" situations, and don't try to take advantage of them. Work hard at being "natural".

Should I exaggerate on my application to get myself shortlisted?

Only if you are prepared to carry on exaggerating at the interview. Don't refer to anything that you are not able and prepared to answer questions on. Governors particularly are often desperate for something to ask in interviews and jump at the opportunity to question you about something they can understand, like your bogus claim to read, go to theatre, or hang glide as a hobby.

The governor on our panel was also mildly unimpressed about poor presentation, spelling and grammar in teachers' applications, as governors are wont to be, apparently. The moral is clear. Leave yourself time to write your application and re-read it again a few days later. Better still, even if you regard it as personal and confidential, get

someone else to read it through and make suggestions before you send it off.

And do yourself and the interviewers a favour: type it. One teacher who mentioned an interest in computers and word processing in a barely-legible, handwritten application, wasn't called for interview.

Promotion points are in the offering at my school, and I've got genuine financial problems. Should I claim personal need to back up my case for promotion?

Gratifying unanimity from the panel on this subject. Only in the rare case where candidates are neck-and-neck in other respects is personal need a criterion in promotion decisions.

There is to be an interview day at my school for a fairly senior post. Both internal and external candidates are to be considered. A colleague has opened a book on the outcome. What are the finer points of form to be taken into consideration in picking a winner?

It's a rule of thumb that internal candidates, providing they're well-qualified, start with a better chance. Sometimes, it's a foregone conclusion who's going to be appointed and the interviews are a formality insisted upon by the local authority. Don't take popular support at staffroom level as an indicator. Senior staff opinion is more important. Study previous deci-

sions. One member of our panel appointed an outsider against what he felt to be popular support. He knew that the candidate would have to exceed to win the staff round. He turned out to be a "dudger" – in fact, an example of deliberate "overpraise".

Internal candidates for pastoral-type jobs have an advantage because they're likely to have a close knowledge of the school and its pupils. On the other hand, new heads may want to recruit their own teams. Watch out for the "new broom" phenomenon.

Finally, it's unfair to try and influence the result from the sidelines. One panel member reported that an external candidate running against an internal favourite withdrew, largely because of the ill-feeling he detected from members of staff he came in contact with during the interview day.

I'm worried that in a forthcoming interview I'm going to be asked whether I intend to start a family.

A pragmatic suggestion for women teachers who want promotion and babies: don't get married. You're less likely to be asked the question if you appear on the form as single. If you are asked the question, you can either politely decline to reply, extol the virtues of motherhood as a way of understanding children better (particularly if there is a woman on the interviewing panel – watch out for wedding rings here) or better still, go for a more nebulous response. Tell the panel how you see yourself in, say, five years' time, and stick to teaching matters in your answer.

Should I seek promotion by taking on extra work in the hope that I'll eventually be rewarded for it?

Yes. Again, unanimity from the panel. One member agreed that teachers get "used" in this way, and the general consensus was that, while extra work and responsibility are always extremely useful in the promotion stakes, there's no substitute for classroom talent.

It may be more worthwhile, particularly in your early years of teaching, to be seen to be developing your professional skills by going for more in-service training and added qualifications. If you do choose to give extra effort, make sure it's connected with your promotion plans. For example, take on an extra administrative task connected with your subject area rather than volunteering to coach the swimming team. Don't take on too much, and regard "deals" with suspicion.

How much dishonesty and corruption is involved in the promotion stakes?

Hard to quantify – there are certainly some dark dealings on both sides of the interview desk. One head reported that an avowedly "committed Christian" appointed as a head of department had forged both a distinguished military record and an excellent set of academic qualifications. He had to be summarily dismissed. There were stories of political discrimination with blame equally divided between left and right-wingers. In the 1950s, one panel member, then in local government, let it be known he was going into teaching. He was immediately invited to become a freemason. He declined.

But when Mrs Y arrived and saw Mr Z, she asked: "What's he doing here?" The head explained that it was a practice to have the first deputy in the interview. Mrs Y announced that Mr Z could take part only as observer. He couldn't ask the candidates any questions.

During the questioning – led by Mrs Y – Mr Z noticed she seemed to favour the less-fancied candidate. This candidate was an active member of the political party which Mrs Y represented on the local council. However, Mr Z sat in enforced silence during the interviews and ensuing discussion, a silence only relieved when the adviser asked him a direct question. Constrained by politeness, Mr Z gave an answer which gave the final impetus for the adviser and the head to outvote Mrs Y. Mrs Y tore up her documents and flounced out of the office.

The first deputy, claims that as a result of these events he was blacklisted: an official of the local authority confided to him that Mrs Y – also a member of a subcommittee responsible for drawing up shortlists of potential heads from within the authority – was blocking his applications for local headships.

Reviews

Significant twists

By Martin Fagg

The Oxford Book of Political Anecdotes, Edited by Paul Johnson. Oxford University Press £10.95, 0 19 214121 X.

Anthologies are like parties: one looks round for the people who aren't there as well as for those who are. There are lots of absences from Mr Johnson's gathering whom he might well have invited and whom one would have liked to see again; but when the actual guest-list is as rich and well-assorted as it proves to be here, it would be churlish to complain.

His introductory claim that political anecdotes however garbled "are a valuable source of historical truth" is unassailable. One could say that they are often a more valuable source of historical truth than conventional records in that they probe to the very heart of personality in a way often unattainable by orthodox documentation. In fact, it is only if an anecdote is felt by colleagues and contemporaries at large to embody some essential and characteristic insight that it stands much chance of becoming permanently circulating anecdotal coin. Thus, when Disraeli, visiting Dalmeny, Rosebery's home, entered his profession in the visitors' book as "patriotism" and Gladstone later wrote "apprentice" in the same column, they were telling us far more about themselves - if only about their affectations - than many pages of Hansard could disclose. This little gem, from Robert Rhodes James' "Rosebery", has for me far more anecdotal lustre than some of the rather dull Gladstone/Disraeli extracts that Mr Johnson prefers to it.

Mr Johnson's working definition of anecdote is elastic enough to embrace sizeable chunks of Hansard and excerpts from other speeches, notably Daniel O'Connell's glorious verbal mugging of Disraeli. This, with its assertion of Disraeli's direct lineal descent from "the impenitent thief on the Cross" and a host of other pleasanties, shows to what a pallid and anaemic level political invective has dwindled in the 20th century - at least since Lloyd George.

Some of the editor's inclusions are more full-blown biographical episodes than anecdotes which are, of their essence, brief. Several of these lengthier passages fail to earn their space, especially the egregious Richard Crossman's diary account of how he, Aneurin Bevan and Morgan Phillips lied in court to get libel damages out of the *Spectator*; and an interminably repetitious slice of Sir Patrick Hastings' cross-examination of the luckless Harold Laski during the latter's failed libel action in 1945 against the *Newark Advertiser*.

Given Mr Johnson's current political persuasion (though in his introduction he recalls that as a young socialist he was so high-minded that he could not bring himself to smoke the *de luxe* cigar provided by a millionaire lunchtime host) one hardly expects a good anecdotal press for figures of the post-war Left; and, sure enough, they come across as for the most part arrogant, time-serving, intriguing, indecisive and inept; though Barbara Castle is seen to possess an engaging gift for self-mockery.

Two deadly little stories under the heading "A Cammy Crofter's Grandson" impale the very rich Macmillan's amazing financial carelessness; and it is the lecherous blackguard or "Goat" side of Lloyd George that is principally illustrated. J. M. Keynes' wonderful evocation of Lloyd George as a rootless, amoral, prismatic magician is also included - but this again is descriptive analysis, not anecdote proper.

I detected few imprecisions, though Ramsey Mac's resignation is twice undated by a year; and Attlee's "limerick about" himself (the only immodest act of a notably unassuming career) is mysteriously not printed as such.

The funniest anecdote of them all? For me - Beaverbrook's priceless story about the Coalition's council of war at Cannes at the end of 1921. Sir Laming Worthington-Evans argues irresistibly for an immediate appeal to the electorate. He concludes dramatically, and Lloyd George seems just about to give the word - when, suddenly, an unholier parrot screams "You bloody fool! You bloody fool!" Gales of laughter. No decision - and history, possibly, given a significant twist.



OLD SWEATS

Gerald Haigh writes in praise of National Service

The Best Years of Their Lives: The National Service Experience 1945-63. By Trevor Royle. Michael Joseph £12.95, 0 7181 2459 6.

My dad took me to Barnsley station, on Thursday September 15 1955, and he regularly recalls, always with that air of fresh remembrance familiar in the very old, how after taking his leave he sneaked back for another peep at me round the corner of the platform. I went to the Royal Signals at Catterick, where I trained as a soldier and a clerk, and then via the transit camp at Chester I went by troopship to Singapore where, in a small office every detail of which is still vivid within me, I wielded my typewriter in the service of the Queen. I went in as a private soldier - a Signalman to be more precise - and I came out bearing the same rank, my confidential reports declaring my lack of suitability for any sort of leadership. I was tall, thin, bespectacled, unimpaired and very homesick, and when the Singapore Transport Company buses went past the end of Tyersall Road, I used to imagine, with a tangible pang, that I might get on one and buy a ticket to Holyland Common.

I longed for release, and like all the National Servicemen in Royle's book I kept my countdown calendar. And yet, again like the men in the book, when the end came I stood with my travel warrant at Chester station and felt deeply sad to leave the friends I had been with through it all. Even as I write, my Far East Land Forces shoulder flash is on a bookshelf near me, my General Service Medal is in the desk drawer, and safe within me, as certain as the mental imprint of my regimental number, is the knowledge that I did what I did. As a boy of 18 I marched on sparkling frosty mornings to a regimental band; I saw the setting sun with Gibraltar to one side and Africa to the other; I ate fearsome curry in Zam-Zams on the Bras Basah Road; I lent money to Signalman Welch, who promptly deserted to the arms of his Chinese girlfriend. Compared with all this, a YTS course, or three years at Brighton Poly are, as means of helping the young to mature, about as effective as teaching them to plait sawdust.

The deeply paradoxical nature of National Service - that it was often a monumental waste of time, but that it had a permanent and generally beneficial effect on all who did it - comes out very strongly in Royle's book. He traces the history of conscription, leading up to the National Service Act of 1947, and then tells in absorbing detail how conscripts were used in the three services up to the time of the demob of second Lieutenant Richard Vaughan, the last National Serviceman, from the Royal Army Pay Corps on May 13 1963. The facts are illuminated throughout by the firsthand accounts of servicemen, who combine



to show the almost insane contrasts which lurked between the various places where National Servicemen marked off their 730 day watchcharts. Senior Aircraftman David McNeill, unlike the many in the RAF who never even saw an aeroplane, had the occasional flight in an ageing bomber. "I also saw unforgettable things which could not now even be seen by a millionaire with time on his hands - the misty coast of Cornwall from a Lancaster on a spring morning, the Cathedral of Mosta before the tourist invasion and the last serving Spitfire climbing into an eggshell blue sky over Grand Harbour."

Lance Corporal Jim Laird, on the other hand, did his two years in Korea. "Something hit the back of the trench and I went out like a light. When he awoke it was to the reality of 44th MASH, then Stoke Mandeville, and life in a wheelchair."

Old sweats will delight in picking small holes in the book. Surely it was not Section 10 of the Army Act which defined "Conduct prejudicial to Good Order and Military Discipline", but Section 40, (later Section 69)? And when you were called up to Training Regiments which Royle lists, you all went to TTR, going on to the others for trade training. And though Royle says the trooper certainly took me to the Far East in early 1956, small point, but this claims to be military history after all.

What a different world Royle reminds us of. It was a time when young soldiers could be taken to

watch thermonuclear bombs going off, with no protection other than advice to cover their eyes with their hands. "We could see all the bones in our fingers." It was a time when ten bob was a lot of money and six pounds was a weekly wage, a time when to be 18 was to be gawky, eager and very very inexperienced. Against that background, National Service was what so many needed. It was an escape from parochial surroundings, from mother's Sunday dinners, from a treadmill which led from the school gates into the same factory where your dad and your brother worked. It was a way of leaving home in a way which brought credit rather than suspicion and when you got to Catterick, or Aldershot, or Padgate, you suddenly discovered that Johnny Biglad round the corner who always made you feel small back home was, in fact, very much indeed.

The Eighties are manifestly not the Fifties, and bob is what the *Sunday Times* costs, and we now have the UEA, Greenham Common, the Pill and Alan Bleasdale. But youth still has its treachery and its Johnny Biglads, to say nothing of mum's Sunday dinners, and all of us must yearn for a system which would help our young folk to see something beyond. As Royle says, in his discussion of whether we still need some form of service for young people, nobody in his right mind wants National Service back in the form we had it then. I cannot easily forget the gratuitous sadism of some NCOs in basic training, or the sight of a 19-year-old boy falling unconscious from drink out of a taxi at the camp gate, or the archaic and feudal division between officers and other ranks.

If only, though, there were some way to recapture for both young men and young women the feeling of being away from home, of depending upon each other, of discovering the faults and virtues within self and fellows. In my billet at Catterick there was a boy from Eton, a gentle and generous farmworker from Norfolk, a streetwise Liverpudlian, a... well, there were about 20 of us, all different. It never happens today, and such is the polarization that is being inflicted upon us, we need it more than ever. Royle quotes David Owen who, in 1984, called for a scheme whereby a young people could serve the community for a year after school. Provided that it involved leaving home to live in community with others, then we ought to do it. Mind you, someone would have to build in an absolutely waterproof way of stopping the public schoolboys from inventing stories.

An exhibition, "The Best Years of Their Lives: The National Service Experience 1945-63", is on display at the Imperial War Museum, Lambeth Road, London SE1 until May 1987. 10am-5.30pm Mon-Sat, 2pm-5.30pm Sun.

BOOKS

The lightning flash

Josephine Gardiner on the power of irony

The Alluring Problem. An Essay on Irony. By D J Enright. Oxford University Press £12.95.

Before I had put pen to paper, I thought it might be nice to begin this review with a recent ironic anecdote of my own experience. I hung around hopefully, pen poised, but Fate refused to be tempted. So I shall have to be content with a piece of second-hand information provided by a television programme, apparently the spaceship *Voyager*, which is currently racing boldly into the darkest corners of the universe, carries a message of brotherhood and greeting recorded by Dr Kurt Waldheim. Whether or not a trace of irony is discernible here is both a matter of personal opinion (the programme's narrator did not express one) and of geography, for it seems unlikely that the message will provoke many mischievous smiles among the little green men.

Irony presumes the existence of a double or multiple audience, of which only a section will be able to see the joke. On this Mr Enright is in agreement with the *Concise Oxford Dictionary* and *Fowler's Modern English Usage*, but this is about as far as he is prepared to commit himself on the matter of definition. Most people can recognize irony in practice, but any attempt to define irony, to pin it down or systematically abstract it from its satirical, cynical, humorous and sarcastic stabilities will serve only to underline its slippery and elusive character, as any teacher of English Literature will tell you. V S Pritchett said that satire, for instance, is "anger laughing at its own futility", but Mr Enright points out that this applies as well, if not better, to irony.

Rather than trying to clarify the distinctions between irony, satire and Julian Barnes' "well brushed, well educated coincidences", Mr Enright invites his readers to observe how shadowy these distinctions can be. He explores the ironic mode by dissecting a wealth of thought-provoking and often highly entertaining, individual examples from literature and life. The aim of the book, and the "problem" of the title is to judge the effectiveness of

the "lightning flash" of irony on the landscape of life by looking at the after-image by which we are enlightened. Through its deployment of the unexpected and avoidance of the obvious, irony, like poetry, has the power to shift the perspective and locate significance, and it is this quality which Mr Enright finds so seductive.

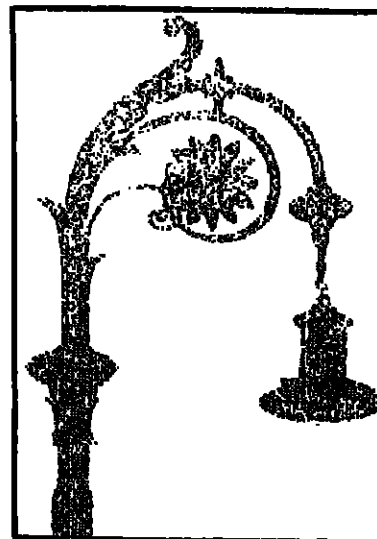
As he deals with real life ironies, Mr Enright tells some good jokes. There is the story (reported in *The Times*) of the woman who, in a suicide leap from the 19th floor, landed on a man. He survived to sue her estate, claiming that the woman had jumped "without regard for human safety". An elderly joke about a farmer who discovers his son in the hayloft with the milkmaid and exclaims "Next you'll be smoking!" may have lost its impact because of the "relative shift on the scale of sinfulness between cigarettes and sex". Some ironies only emerge with hindsight, like Nixon's CREEP - an acronym which acquired aptness as Watergate unfolded, others through want of insight, as in the case of the blurb writer who declared that Alexander Fleming (who discovered penicillin) was not "cast in a heroic mould". This could have been intentionally mischievous, but I doubt it. VULVA however, (Vintners' and United Licensed Victuallers' Association) seems to me to be a case of sublime carelessness.

Less funny is the fact that the RSPB recently decided to abandon its practice of embarrassing convicted robbers of birds' nests by publishing their names and addresses because it was enabling the thieves to contact one another in order to pool techniques and resources. I doist with his own petard is the prime expression of our subject", as Enright says. Also on the subject of situational irony, Enright notes a poem by C P Cavendish in which the Delphic Oracle warns the Emperor Nero to "beware the age of seventy three". Being only 30, Nero is unperturbed, but the army which will defeat him is already being prepared by Galba, a man in his seventy third year. This seems to belong to the same ironic category as Macbeth's confident assumption about the location of Birnam Wood.

Criticism has been levelled at the ironic approach: it encourages a nihilistic attitude, passivity or a smug self-regard. These are dealt with politely by the author, who also observes that irony finds few friends among politicians and ideologues, for "irony's guns face in every direction". Nor is there a niche for irony in Utopia; after the revolution irony, like satire, "gets a prompt and dishonourable discharge". Unlike satire, irony does not necessarily require a victim or butt, and even when it does, irony can be gentle.

Perhaps we do live in an age which is particularly disposed to appreciate the ironic (Enright does not fail to point out the "ultimate irony" of nuclear defence), but the massive scope of the book's literary selections proves that the seeking of significance has long been part of human nature. Enright leaps with often startling agility from Socrates to Kierkegaard, from the Bible to Faust, from Macbeth to a Buddhist haiku. The Bible, Proust, Henry James, Pope (ironist, satirist or tease?), Shakespeare and others get a chapter each or nearly, while I was pleased to see that Freud, who detected an ironic flavour in the symbolism of the unconscious and the psychopathology of everyday life, was included. I was puzzled by the very brief treatment of Thomas Hardy.

The Innumerate Will working its "eternal artifice in a disconcerted" was probably Hardy's major preoccupation; perhaps Mr Enright feels that Hardy has been adequately discussed elsewhere (his choice of chapter heading - Hardy Perennial - would seem to suggest this) but I received the impression that Mr Enright thinks that Hardy wields irony with a heavy hand. Later in the book we are told that Poland's film of *Tess of the d'Urbervilles* was shown to the people of Shandong province, in China. The love story left them unmoved, but they reacted with astonishment to the sight of a nineteenth century threshing machine, which was far in advance of the technology they were used to. Mr Enright relates this as an example of illumination rather than irony, but I think that Thomas Hardy would have managed a wry smile.



Lamposts, litterbins, balconies, fan-lights, spires and weathervanes are among the street furniture observed by Ian Hesseberg in an unusual visual survey of London in Detail (John Murray, £9.95).

PAPER BACKS

The City in Transition, by W Lever and C Moore (Oxford University Press £7.95). The Economic and Social Research Council's Inner Cities research programme yields a number of titles. Typically, the regeneration of Clydeside is set against the changing structure of business and employment in the conurbation. Ways in which changes must be faced are suggested. Effective solutions could be prototyped for other depressed areas.

Sinclair City? by M Boddy, I Laverling and K Bassett (Oxford University Press £7.95). An ESRC research report on the economic changes evolving in the M4 corridor has special emphasis on the position in Bristol. There is growth and decline in differing sectors. An analysis of the strategies used in private and public enterprises could provide pointers for action elsewhere. The London Employment Problem, by N Duck, I Gordon and K Young (Oxford University Press £7.95). Another ESRC team looks at the job market in London, with particular attention to boroughs in the outer west and inner south-east areas. Deconcentration, political manoeuvrings, immigration and the quality of labour available are just a few of the variables involved.

F W Kellaway

Tragic mirth

Euripides: Orestes. Introduction and commentary by C W Willink. Oxford: Clarendon Press £35.00, 0 19 814017 7.

Orestes was one of the most popular of all Greek tragedies in antiquity, but it is not much read or performed nowadays. I dimly recall attending as a schoolboy a performance in the King's College London series which prompted a good deal of unexpected mirth (until then we had thought all Greek tragedy tragic). The mirth was our response to the play itself, not to shortcomings in the production. After murdering Clytemnestra, Orestes sponsors the first half of the play on his sick-bed, initially deranged, betrayed by Menelaus he is sentenced to death (along with Electra) by the Argives; he takes revenge on him by a plot to kill his wife Helen of Troy; who is saved in the nick of time - in what our audience found an amusing *coup de théâtre* - by the intervention of Apollo, and defied.

Charles Willink would not have been as surprised by our reaction as we were. "Orestes" he begins "is a play to be enjoyed." With an infectious exuberance which survives 3000 pages of small type he describes it as "a baroque kind of tragic-comedy or *drame noir*", "a many-faceted, highly sophisticated *tour de force* of audacious myth-invention and poetic art". His splendid edition of the Greek text, the culmination of the labours of a lifetime, never loses sight of this main point. Its chief contribution is the commentary, which pursues or rather attacks problems of text, metre and grammar in the accustomed fashion (it is relatively parsimonious on usage and *royals*), but is also alert to the play's rhetoric and dramaturgy.

The book is not for the uninitiated, and I fancy only the introduction, which explores all aspects of the play and offers a lucid, well-written and attractive interpretation, will be accessible to the average undergraduate. Classical scholars, however, will want to forego the candlelit dinner for twit will cost them to own a copy. It is almost worth it just for the brilliant treatment of Tantalus as *air-borne* sophist.

Malcolm Schofield

Green Grass

Writers and Politics in West Germany. By K Stuart Parkes. Croom Helm £22.50, 0 7099 4007 6. French Existentialist Fiction: Changing Moral Perspectives. By Terry Keefe. Croom Helm £19.95, 0 7099 3107 7.

The ideological wars of our century have made "writers and politics" inevitable as a focus for literary criticism. While 1945 was not the "year zero" in German history that some supposed, it found West German writers sharing positions of exorcising the past and relating to a new constitution, within an intellectual tradition ambiguous in its attitude to the state.

Parkes traces the political activities of leading writers from the immediate postwar years, through disillusionment, flirtation with the student movements and the subsequent faint of the *Erstausbau* to the Greens of the Eighties. The second part consists in studies of four writers: Grass, Böll, Enzensberger and Walser. An unusually optimistic conclusion rounds off this very coherent version of a complex story.

Terry Keefe tackles a better-known area in his study of Camus, Sartre and de Beauvoir. He looks at their fiction before, during and after the Second World War, examining their treatment of the moral problems raised by the relationship between the individual and society. The result is an exhaustive, systematic study of this feature in the work of the three writers, helping to confirm their place in French intellectual life.

Robin Durr



A portrait of Bessie Smith in the Thirties, from A Star is Torn (Virago £7.95, to be published on October 16) which describes the triumphs and tragedies of 13 women singers, from Marie Lloyd to Janis Joplin.

Borges lives

Fictions. By Jorge Luis Borges. John Calder £3.95, 0 7145 4083 8. Seven Nights. By Jorge Luis Borges. Faber £3.95, 0 5712 13737 7. One Human Minute. By Stanislaw Lem. André Deutsch £7.95, 0 233 97980 8.

It's good to have *Fictions* reissued; it really made Borges' reputation outside the Spanish-speaking world, using narrative games with time, myths,

books and crimes to define his particular poetic territory. Borges' own lifelong debts as a writer are acknowledged handsomely in a new collection of informal lectures, though critical theorists who claim his sanction will find he doesn't indulge them. Lem, like Calvin, has learnt imaginatively from the master; his reviews of novel-written books portray a world logically conceived, but terrifyingly. Borges is dead but lives characteristically in the writers who succeed him; not least when they transform unreal dreams into plausible nightmares.

Tom Devine

KEY DATA 86

A new annual from the Central Statistical Office

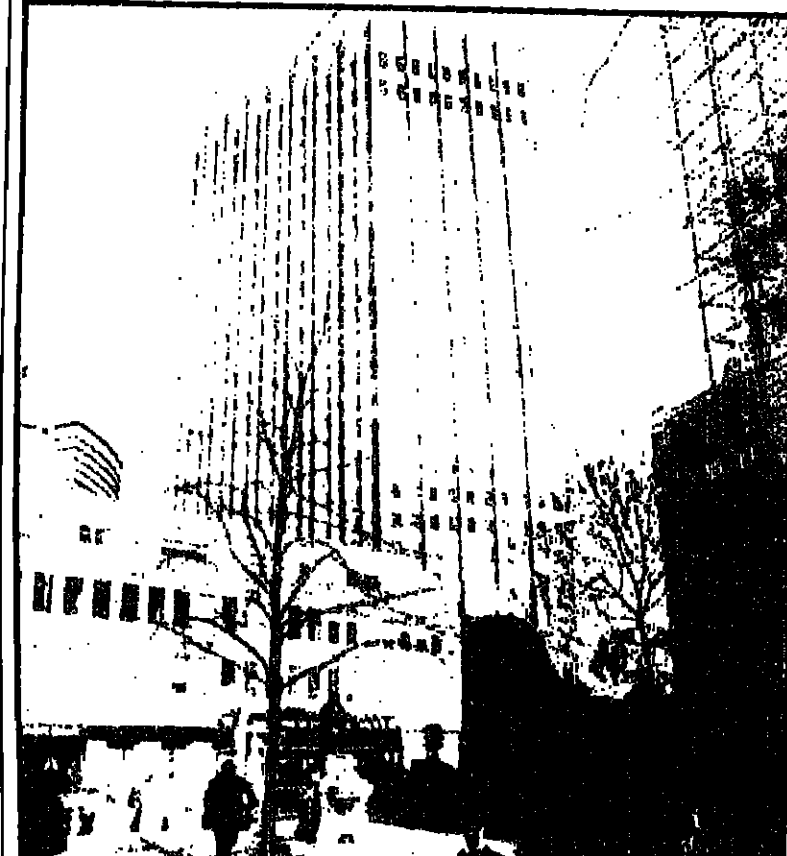
Comprehensive, compact and cheap. Key Data is the ideal research aid for students. It provides key statistics in each social and economic domain, taken from such well established and acclaimed CSO sources as Social Trends, Economic Trends, UK National Accounts and Monthly Digest of Statistics.

84 pages illus

ISBN 0 11 620249 1

Paperback £2.95

BOOKS IN CLASS



The Stock Exchange building: scene of the biggest financial upheaval "for more than a century... the Big Bang is going to affect us all". But what is it? A timely study by Guy Galletly and Nicholas Ritchie reveals all - The Big Bang: The Financial Revolution in the City of London and What It Means to You (Northcote House £4.95).

Proven formula

Economics for GCSE. By Alain Anderton
Collins Educational £5.50. 00 327386 5
(non-net), 00 197308 8 (net).

Those already familiar with the A level text *Economics: A New Approach* will instantly recognise Mr Anderton's most recent offering. The proven formula of combining an enthusiastic writing style with lively cartoons and eye-catching photo-montages has also been adopted for this GCSE text.

The book is divided into 87 self-contained units, each of which contains more than enough material for an hour-long teaching period. Each unit follows the same pattern. A case study accompanied by questions (Study Points) introduces the central theme of the unit. The theoretical background is then explained in the text, with relevant points being brought out and highlighted. Assignments in the form of data-response questions and essay titles reinforce the points made in each unit, and coursework suggestions show the keen pupil how he or she might develop the topic further. Finally a box of Key Terms lists the specialist vocabulary with accompanying definitions introduced in the text.

The units are grouped in a logical order, and fit neatly into the teaching model suggested for the subject by at least one of the GCSE syllabuses. Units 1-17 (The Individual) deal with the economic problem and its solution by the price mechanism. Hence fundamental concepts such as demand, supply and elasticity are covered before factor markets and the structure of industry, which are tackled in the

next 30 units (The Firm). The National Economy (Units 48-74) considers, among other things, the role of government in the circular flow of income. The final 13 units cover trade, the EEC, the developing world, and alternative economic systems under the heading of The International Economy. This coherent framework might well tempt the hard-pressed teacher to devise a scheme of work to follow the same pattern.

In terms of detail the book is comprehensive enough for every GCSE syllabus in economics. There are no over-simplifications of complexities, and topics such as marginal revenue product, economic rent and measures of the money supply are explained in detail. More able candidates will appreciate this rigour. The author has made a genuine attempt to cater for the needs of less able youngsters as well. He has, for instance, balanced the 24 data response exercises based on *Financial Times* extracts with 27 from local evening papers and the *Advertiser*. Despite this, however, I feel that such pupils will still find the book difficult simply because it is so thorough.

Economics for GCSE should be at the right hand of every teacher struggling to come to terms with the approaches implicit in the new exam. Able pupils using it will find that they are almost unconsciously gaining economic understanding as they work through it, and even the less able should benefit from its use if helped to do so by the teacher.

Bill Jackson

An Introduction to the UK Economy. Second edition. By Colin Harbury and Richard G Lipsey. (Pitman £6.50). This second edition of the companion to "Lipsey" has been extensively revised to provide up-to-date institutional detail and commentary on the statistical introduction, in which he shows how monetarist theories gained an astonishingly rapid acceptance by bankers, journalists, and other leaders of public opinion. The only group which remained relatively immune was the Keynesian economists in which they believed and go back to the simple and crude notions of the quantity theory of money.

DJW

Promoting literacy

Understanding Economics: The Young Person as Producer, the Young Person as Consumer and the Young Person as Citizen.
Longman Economic Education 14-16 Project. £7.95 each.

The objective of the Economics Education 14-16 Project, in its own words, is to promote and develop "economic literacy as part of the general education of all young people". Beginning in 1976, Phase 1 of the project concentrated on research into existing economics education and the views of teachers as to how it might develop. Phase 2 developed the materials which are now published. Phase 3 involved testing and evaluation of the project materials, and their dissemination among schools.

The main end product of so major and significant a project cannot be fully reviewed in the space available. The project team have been in close touch with examination boards throughout the process, and their influence has been immense. Meanwhile, it has become politically desirable to promote economic awareness. There has been a complex interaction between the project and developments outside.

The primary intention of Phase 2 was to create a package of exemplar materials. These would give guidance to teachers, who would devise their own resources with the help of the project's rationale and objectives. They were to be "suggestive rather than prescriptive", and were to be used particularly in the training of teachers. Initially the materials were used in this way; now that they have been tested and refined they are available as they stand. They are designed for pupils of all abilities. A major objective was to move away from didactic teaching methods, towards discussion and investigation. Each unit contains material designed to stimulate pupils, together with extensive notes for the teacher. There are a number of role plays based on information provided; some units require pupils to conduct surveys; many units provide worksheets.

Teachers seeking a basic exposition of economic principles will be disappointed. Rather the emphasis is on enlarging the pupils' knowledge of terms and concepts; a glossary summarises the terms introduced. Armed with this awareness, pupils may then be able to consider and discuss issues and draw some of their own conclusions. There is almost no standard analysis here, but there is tremendous scope for investigating the way the world works. There is a great deal of material relating to micro-economic phenomena; in the micro economic area the emphasis is on the public sector. It was found to be very difficult to create materials relating to overall macro-economic policy, at this level. Judged by the project's own criteria, these materials are a tremendous success. They can produce situations which are educationally very exciting. However, it must be said that they will work well only with a substantial input from the teacher. Imagination, classroom control and enthusiasm are all essential complements to the materials. Without them, some units can produce a flat atmosphere and some well worn questions from pupils about the point of it all. In particular, less able pupils are prone to finish the suggested tasks very quickly unless the teacher can give stage by stage guidance on how to go into adequate detail. It's up to the teacher to ensure effective use, the more so when tasks set are open-ended.

How can the materials best be used? The volumes here reviewed are a guide to the teaching units. The units themselves are available as a complete pack at £200 (exclusive of the video). Each section can be bought separately: the Producer Units for £80, the Consumer



ECONOMICS

units for £65 and the Citizen units for £55. Alternatively, each unit is available on its own (prices vary). A compromise might be to buy the three guides and choose individual units from among them. The complete pack would be expensive if it were decided to use the materials only with specialising groups, but less so if it were part of a core curriculum for a whole year group. All the consumable sheets can be copied, and resource sheets come in class sets.

How do the materials fit GCSE? This is a difficult yet crucial question. So pervasive has the influence of the project been that its terminology and framework have been built into some GCSE syllabuses. Yet it seems unlikely that the materials contain sufficient content even for less able pupils aiming at a GCSE Economics option. A complete course would require much supplementing with data, simple analysis, exercises and writing in depth on topics which the project does not cover. It should be born in mind that several textbooks are already available for the new exam. Some, at least, of these are a spectacular improvement on the texts commonly used for O level and CSE in the past. (Their quality may owe something to the influence of the project, which would attest to its worth.) Teachers will probably decide that they are a better basis for GCSE yet pupils studying for the exam could benefit greatly from the project materials, especially at the beginning of the course. With such a foundation they would develop their knowledge of the real world and would be less prone to see economics as founded in abstraction.

A major objective of the project materials was to enable non-economists to teach economic awareness effectively. While it is probably important that trained economists are involved in setting up courses within which the materials are used, non-economists will find that the teachers' notes give them a substantial background of objectives and context, and will undoubtedly use the materials with confidence.

Nancy Wall

Cartoons and case studies

Action Economics. By Andrew Lenke. Macmillan Education £5.95. 0 333 37311 1.

Action Economics is written for the GCSE examination in economics and other courses with a significant economics content. There is a good mix of text, newspaper reports, diagrams, photographs, cartoons and case studies. Information is grouped into several sections: an introduction, working business, buying and selling, finance, steering the economy, and trade. Each of these sections is further sub-divided into units which are good length for about two hours work.

Given the excellent presentation and structure it is rather disappointing to find that the target ability level must be grades A to C. This is particularly true of many of the diagrams and

statistics presented. In particular, the diagram showing the effective exchange rate of the pound is unclear, and there is a tendency to present too many statistics at one time. Some statistics are regrettably already outdated, being for the period 1981/82.

The book claims to use an enquiry-based approach with active learning tasks but I find very little evidence of this. Tasks are presented in the form of questions rather than assignments which would have been more in the spirit of GCSE. The questions do little more than develop skills such as comprehension and interpretation.

As in most economics textbooks discussion of the global economy is lacking. Whilst income differences and living standards within the UK are examined, no comparison is made with the Third World poverty. The section on the world's rich and poor also gives

the curious impression that economic planning might actually be a reason for poverty.

The final section on trade presents the debate about free trade versus protectionism very well but makes no reference to the important area of government aid. My final criticism is that while the book makes many efforts to be non-sexist, in a number of cases it fails. I find this frustrating in a book published in 1986.

It is very easy to be critical when reviewing new books. On this occasion it would be fair to say that I have never found an economics textbook which does not have the types of faults I have noted. Reading this book convinces me that although the state of the art is not perfect, it is getting better.

Richard Welford

Another parish

CHILDREN'S LITERATURE

The Eyes of the Blind. By Alison Morgan. Oxford University Press £6.95. 0 19 271542 9.

The Assyrian came down like a wolf on the fold... his cohorts included perfectly decent, misunderstood characters like Adad, whose father is a witchdoctor, but who only wants to be an architect. Blinded by one of his own side, Adad makes a good friend for Benjamin, the hero of Alison Morgan's *The Eyes of the Blind*. Benjamin's grandfather is the Prophet Isaiah, no less, but in spite

of this, and in spite of having been brought up an orthodox Jew by a pious father, Benjamin is broad-church enough to help the blind Assyrian carry out idolatrous rituals, and tell Ishvah in his heart that he is only lighting a little lamp, not making sacrifices.

The Bible-study background does make for a splendid action-packed story, full of thrilling twists and turns of plot, but the book has lost any sense of strangeness, the past is not so much another country, in which they do things differently, as another parish of the present, in which once you have been given a quick up-date on their folk customs, the people are just like you and me. The credibility of the story is diminished to say the least; the blind Adad can "design and build" a smoke-house without a word to tell us how, and similar "with-one-bound" jumps are frequent. Yet in spite of everything there are

touching moments in this book. Aspects of Benjamin's human contact with his father, with Adad, with other refugees, with the distant Jehovah give us brief flashes of real thought and feeling. Alison Morgan is a deservedly well-thought-of writer of the contemporary scene. Here, unfortunately, the rigour of fancy dress distracts attention from the likeable and loving vision.

Jill Paton Walsh

There is still time to enter for two competitions launched during Children's Book Week, which ends tomorrow. Competition one invites children under six and seven to eleven, to draw a new hero. Competition two, for over 11s, is for a heroic poem. All entries must arrive at the headquarters of Book Trust, Book House, 43 Elm Hill, London E18 2QZ. (from whom the rules may be obtained) by October 17.

BOOKS

New readers start here

Peggy Heeks on the latest piece of research

Books in the School Curriculum. By Florence Davies. £35.00. 08538 6111 0. The State of Reading. By Jennie Ingham with Valerie Brown. £3.95. 0 85386 112 9. Educational Publishers Council.

September 25 saw the transformation of the National Book League into the Book Trust. One reason for the change was the need to combat "a crisis in society", where access to books is becoming restricted in a culture increasingly dependent on effective communication. The new Book Trust will have the funds and staffing to develop, not isolated promotional events, but a national strategy for encouraging reading from the earliest years. It is, then, especially timely that in its first weeks of life, the National Book League should receive two major reports which can inform that strategy.

The two weighty reports produced for the League stem from a research project of the Educational Publishers Council. The very titles, *Books in the School Curriculum* and *The State of Reading*, reflect current educational concerns, and educationists will be further assured by the inclusion of Michael Marland and Henry Pluckrose on the steering committee.

So much for the background, but what of the content? *Books in the School Curriculum* provides a substantial 400-page review of research relating to children's reading, compiled by Florence Davies, known for her work on the Schools Council's Effective Use of Reading and Reading for Learning projects. It is not new material, but brings together existing work in an illuminating way. The first four sections deal with the way pupils and teachers select books for voluntary reading, and the factors which influence development of such reading. The last section considers the factors

influencing curricular reading. Each section provides an analysis of and commentary on the major research findings, with generous quotations from this source material. The final bibliography, of over 100 books and articles, shows the breadth of interest in children's reading and the need for such a guide as this. With such a mass of important, Florence Davies makes reference easy through an extended contents list, section summaries and a full index, and the clear page layout assists the process.

It is harder to determine the content of the companion volume, *The State of Reading*, for, strangely, it has no contents page. This handicap to access is an especial pity for the volume presents original field research in 95 schools in 5 L.E.A.s. Selected teachers in these schools kept diaries of a week's classroom activities and the learning resources used. Subsequent day visits were made to 50 of the schools, to discuss attitudes towards books, their availability to support curricular work, the use of worksheets and library organization. Statistical tables summarize the findings and a final section presents conclusions and recommendations.

It is fascinating stuff; whatever line of educational thought you hold you are likely to find quotes to shock or support it. *The State of Reading* shows that books are used in this country's classrooms, but it is the text not library book that predominates. The textbook is the main teaching aid, with the worksheet often close second. Teachers, to a significant extent, see worksheets as nearer to pupils' needs than books, as a bridge between student and text. School library books are seen mainly as a supplementary source of background information and, as such, dispensable luxuries. This in turn calls into question the role of school library services. They were originally designed to provide short-

term loans, but this survey shows them increasingly regarded as suppliers of basic stock.

Expectedly, in view of its origin with the Educational Publishers Council, the emphasis is on book shortages. The compilers' overall message is "A way must be found of providing the financial investment our education service so badly needs and so well deserves". Readers may pick up other messages from the interview records - for example, that, outside English departments, teachers do little "to encourage reading around a subject, reading for personal development or for the development of research skills"; that departmental libraries tend to make the main school library irrelevant; "Regarding the school library, we don't use it". The world pictured here is one of traditional teaching styles, far removed from that of active resource-based learning presented as a model in the Office of Arts and Libraries' *School Libraries: The Foundations of the Curriculum*. There is a great gap between the practice recorded in *The State of Reading* and current curricular theory. There is a great gap between the solution proposed here - more money for textbooks - and those proposed by HMI in *Survey of Secondary School Libraries in six Local Education Authorities*. There staffing was seen as a more crucial issue than book supply, many resources were found to be under-used and it was better use of existing funding, rather than extra funding, that was urged.

Those trying objectively to identify priorities in the work of linking children and books need help in reconciling these differences. The truth perceived in *The State of Reading* is valid, but it is far from the whole truth. The report is another reminder that the many separate interests in the children's and school book field rarely connect. The new Book Trust could well start here: it is time to mend some of the fractures in the book world.

lingo

Spitting Image

Although most people are aware that "spitting image" means "exact likeness", the use of the phrase as the title of the satirical TV series has perhaps come to suggest a false association with an "image that spits", or a character who mimics or mocks a celebrity.

The expression is actually a corruption of "spitten image", which is itself an altered form of "spit and image". This in turn was an emphatic development of "spit", meaning "likeness", "resemblance", as when the witty and popular 19th-century novelist Theodore Hook makes a character in his *Gilbert Gurney* (1836) say, "You are a queer fellow - the very spit of your father". "Spit" here has the sense of

"saliva ejected from the mouth", and the reference is to a former saying that a child closely resembling its father looks as much like him as if it had been "spit" out of his mouth. French has exactly same sense, so that *C'est son père qui crache* means "He's the spitting image of his father".

The fact that the original saying has been forgotten has led not only to the present corrupt form of the phrase but to alternative but false explanations being offered for it. In his *American Dialect Dictionary*, for example, the lexicographer Harold Wentworth suggests that "spit" is really an alteration of "spirit", while in modern English yet another version of the original has developed as "spitting image". The reference here is alleged to be to a person who appears to be a sort of "mirror image" of someone else, as if one person had "spit" into two. But these two accounts, although admittedly ingenious, ignore the actual source of the term, and it is the old saying that contains the true origin.

Adrian Room

What is giftedness?

The Psychology of Gifted Children. Perspectives on Development and Education. Edited by Joan Freeman. John Wiley £26. 0 471 10255 5.

There is a growing concern in this country and abroad that our most able children are under-achieving in our schools. This concern is shared by the Secretary and Minister of State, parents and teachers and is reflected in the growing membership of the National Association for Curriculum Extension and Enrichment. This book is, therefore, most timely.

Dr Joan Freeman, the editor, has gathered together essays from diverse expert researchers from eight countries. The aim of the book is to assemble the main areas of current thought concerning exceptionally able children.

Current research indicates that our most able children receive the poorest education. We spend a considerable amount of time and effort in helping

children with special disabilities in comparison with our more able. These children need special provision once they have been adequately identified. There are many theoretical and especially practical questions associated with the concept of giftedness which this book addresses. Is gifted a specific or general capacity? What do we know of creativity? Are there special gifts other than the cognitive? How should these children be educated? The book is divided into three sections based on the traditional model of definition and identification: characteristics and behaviour of gifted children and provision for their education.

Part one explores the identification of exceptional children and includes papers as wide-ranging as gifted infants and the importance of the early crucial years, mathematically able, musically giftedness and gifted women.

Part two examines the characteristics and behaviour covering areas such as psychological and emotional de-

velopment as well as issues specific to adolescence. Part three is the weakest section of the book with a dearth of prescription for the more able. This is the section which one would like to see strengthened as both teachers and parents are in need of direct help in providing for these children.

The book will provide a strong knowledge base for all educators and will also dispel much of the ignorance concerning gifted children. In addition the book points to areas for further research. The research and discussion in this book is concerned with gifted children but could have a beneficial effect on the education of all children. The many changes and current discussion about the school curriculum are related to our gifted children certainly but must be seen in the context of all children. The book is recommended for reading by all educators, parents and professionals concerned with the total well being of children.

David George

Appeal of Bob Major

Bellringing. By Ron Johnston. Viking £16.95. 0 670 80176 3.

The Royal Wedding was exciting enough, but some of us reserved our applause for the more formal occasions. And yet for the beautiful fully struck touch of Stedman Caters which was being rung on the Abbey's 10 bells.

Bellringing - "proper" ringing, that is - is an ancient and unashamedly working bell-tower in England as opposed, say, to 14 in Scotland - and there are only 75 outside the British Isles.

English change ringing requires a peal of at least five bells, each rung by a ringer. The bells are hung on a mechanism which allows it to swing in a vertical in each direction, controlled by a rope. The bells are of different sizes and therefore

pitch, from tenor to treble, and they are rung by a band of skilled amateurs who handle the ropes and can, by ring, cause complicated permutations to work themselves through in logical sequence. By contrast, the practice in other countries of simply allowing a Quasimodian random clangour to take place appears simply barbaric. Here, surely, is an area of life where we have unassailable grounds for chauvinistic smugness.

Despite the public nature of the finished product, the bellringer's art is a closed one. Ringing chambers are usually blocked off from easy access and view, and language, too, is both ancient and arcane. Johnson's book grows many examples. "In Stedman Caters and Cinques, the 'odd bob' method of composing short touches is almost invariably used with the aim of keeping the bells in their home positions."

Given all of this, it is unsurprising that the literature of ringing is sparse and unsatisfactory - or rather it was before this book came along.

Johnston gives us a lucid and delightful account of the hobby which has illuminated his existence for 40 years. He tells of the history of ringing, of the technicalities of bells and towers, and he writes in detail about change-ringing methods in a way which will be most helpful to ringers who have problems in understanding things as they happen in the ringing chamber. His lengthy exposition of change-ringing methods, in fact, is far superior to anything else available. That a Professor of Geography can write with love and enthusiasm about bellringing tells us clearly that sanity is still abroad in the land.

Gerald Haigh



Stephen Spender at work, one of the illustrations from *Portraits of Poets* (Carcanet, £9.95), a collection of 64 photographs of contemporary and past poets, including John Betjeman, Philip Larkin and Ted Hughes, to be published on October 23.

lingo

Spitting Image

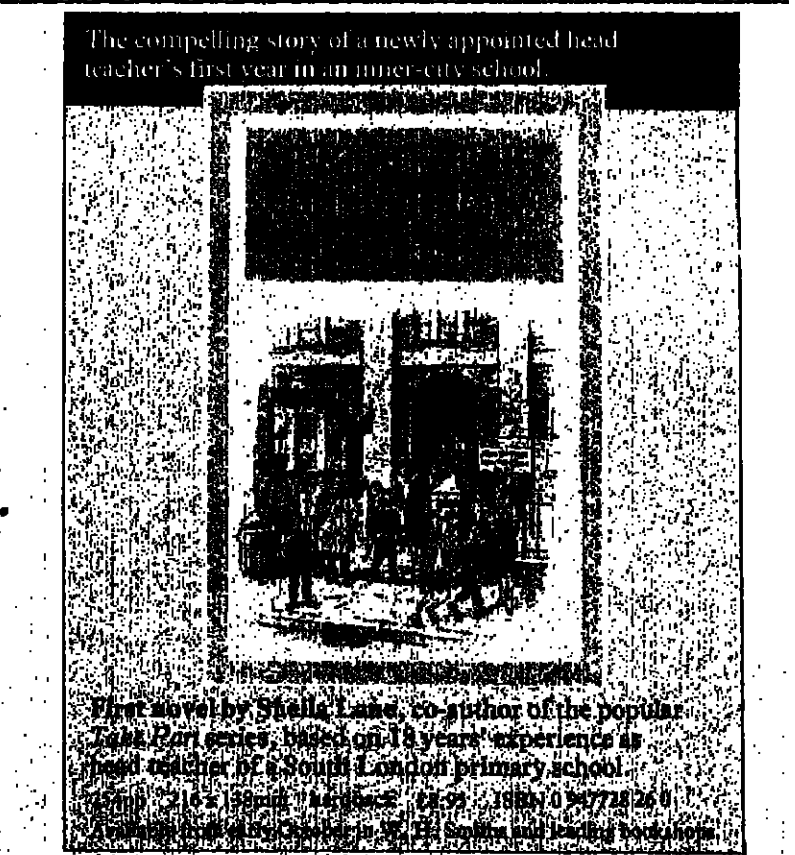
Although most people are aware that "spitting image" means "exact likeness", the use of the phrase as the title of the satirical TV series has perhaps come to suggest a false association with an "image that spits", or a character who mimics or mocks a celebrity.

The expression is actually a corruption of "spitten image", which is itself an altered form of "spit and image". This in turn was an emphatic development of "spit", meaning "likeness", "resemblance", as when the witty and popular 19th-century novelist Theodore Hook makes a character in his *Gilbert Gurney* (1836) say, "You are a queer fellow - the very spit of your father". "Spit" here has the sense of

"saliva ejected from the mouth", and the reference is to a former saying that a child closely resembling its father looks as much like him as if it had been "spit" out of his mouth. French has exactly same sense, so that *C'est son père qui crache* means "He's the spitting image of his father".

The fact that the original saying has been forgotten has led not only to the present corrupt form of the phrase but to alternative but false explanations being offered for it. In his *American Dialect Dictionary*, for example, the lexicographer Harold Wentworth suggests that "spit" is really an alteration of "spirit", while in modern English yet another version of the original has developed as "spitting image". The reference here is alleged to be to a person who appears to be a sort of "mirror image" of someone else, as if one person had "spit" into two. But these two accounts, although admittedly ingenious, ignore the actual source of the term, and it is the old saying that contains the true origin.

Adrian Room



The compelling story of a newly appointed head teacher's first year in an inner-city school.

Robert Royce Limited, Publisher
93 Bedwardine Road, London SE19 3AY
01-771 2496

Out of court

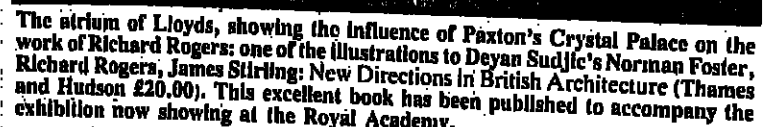
Where's the Justice? By Tony Gifford
Penguin £2.95. 0 14 052358 8

Womanhood

Sarah Jane Evans

Building art

Sebastian Loew



Hazy memories

The Egyptians, says John Marchip White, "turned the valley in which they lived into a veritable museum." Sprightly wall-paintings and ponderous portrait-statues, imposing temples, even the withered but well-preserved folk in person testify to a remote way of life. We perceive a stable, ordered society, close-bound by geography and economic need under a god-king. The strong sunlight delineates everything clearly, while abrupt cliffs confine the compact strip of black mud and green fields. The

The elite bid for survival

R C Richardson

Medievalism

This is an attractively produced and, by today's standards, reasonably priced edition of a book that appears to have been warmly welcomed when it was first published in 1984. Popular religion in both medieval and modern times is now a well-established branch of historical investigation. This volume makes a useful contribution to the field by its discussion of pilgrims, saints, heretics and critics, of popular commitment to the Church, and of attitudes to the Bible and to preaching on the notion of heaven, hell and Purgatory. The text is reinforced with a number of well-chosen illustrations and a substantial bibliography.

Movements of the human heart

Roger Freebairn

Upstairs, downstairs

Walford Davies is a reasoning advocate for all aspects of Thomas's poetry, the developing features of which he stimulatingly examined against the continual backcloth of the poet's use of language. Thomas's reputation affectionately advanced by some to standing criticism of many poets, stressing his interest in the organic processes of nature, the role of poet and the landscape of religious belief, and the dissonance of the secular and the sacred within the shifting movement of recapt poetry. Other (un)referred to Davies's attack on Thomas, there is little adverse comment, however upon which to sharpen the student's critical acumen. Yet, as with other Guides, the reader is constantly returned to the text, in order to form or develop ideas.

In examining *Women in Love*, Grosvenor Holderness offers occasional short passages from other critics and in refuting Leavis's clear moral distinction between the pairs of lovers, he argues powerfully that the novel is dialectic of creation and destruction expressed in conflicting sequences of language. Holderness comments on the lack of good feminist criticism of this novel. Perhaps to have given *Women in Love* to a female critic might have been a less startling proposition for a series that will do much for the open but informed appreciation of literature.

Katya Wattle

Mount Analogue (Penguin £2.95) is the first complete English language text of René Guénon's unfinished exercise in metaphysical mountain climbing as eight set off for the mythical peak. Witty and written in a conversational first person, it's a shame that his untimely death aborted this promising picaresque.

Read Around the World One, reviewed in *The TES* on September 19, is by Jane Moran, and not as stated (Edward Arnold £1.95, 0 7131 7395 5).

Nuclear family

Frances Hill on Brian Clark and the Bomb, the theme of his play 'The Petition' which opened at Wyndham's Theatre this week

"King Harold of England would have been completely justified in using the bomb against William the Conqueror. But if he had we wouldn't have had Shakespeare. We wouldn't have the English language as we know it today... Being conquered may be the end of your world, it may be the end of your life, it may be the end of your happiness, it may be the end of your children's and grand-children's happiness, but that to me is not sufficient justification for ending the world."

That empire come and go but the planet should be allowed to endure is the essence of Brian Clark's position on nuclear weapons and of his play, *The Petition*, which transferred from the National Theatre to Wyndham's on Wednesday. He claims that the argument against the bomb is very simple. The bomb is either a deterrent or it is not. And in his view, it cannot be a deterrent if we are not prepared to use it first. And we should never, in any circumstances, be prepared to use it first.

Brian Clark has been trying to write a play about the bomb for a very long time. He was trying eight years ago when *Whose Life is it Anyway?*, his play about a man paralysed from the neck down who seeks the right to die, had a gigantic success and established him as a leading stage playwright. (He had been writing extensively for television for years.) But his attempts at a play on the bomb kept "coming out as boring agitprop drama".

"It needed a metaphor," he says. One "big enough to cope with the subject." The metaphor he at last found was marriage. "It seems to me that Russia and America live in the same house and it's just too dangerous to throw the curry." In the play an 80-year-old retired general discovers that his 72-year-old wife has signed a petition, published in *The Times*, against the first use of nuclear weapons. The general himself is a passionate believer in the deterrent. There follows some debate between the couple on the nuclear issue but most of the rest of the drama consists in the exploration - often, specially in the first Act, amusing exploration - of a 55-year marriage.

"Having got the metaphor I could

forget about the bomb really and just write about the marriage... I wanted to celebrate the virtues of just carrying on and staying with it." The audience, or part of it, may feel some frustration at the play's not debating the nuclear issue in more detail. Is Lady Elizabeth Milne a unilateralist disarmament? What are her views on Nato? On conventional forces? What, indeed, are Brian Clark's views on these matters? He avoids giving an answer on unilateral disarmament, but advocates building up conventional forces to match those of the Russians. But he then insists, again, that all this is irrelevant. What matters is the refusal to contemplate a first strike.

This passionate concern for finding the simple, morally right answer to seemingly complicated political and social questions is perhaps in part an inheritance of a Thirties working-class but the strongest moral values. Son of a blacksmith, a trade unionist in the "Christian Socialist" tradition, whom trade unionism was about "feeding and brotherhood" and those views on the present-day print workers' "nest feathering" were "unprintable". Brian Clark displays a fierce nostalgia for the decency and high principles he feels were common currency in this

country in his youth. In the Bristol street he lived in as a child people hung their door keys through their letter boxes on pieces of string and, despite the real poverty, there was never a theft. He feels terribly the "loss of principle". He expresses the greatest possible contempt for the current government and for the nostrum that the market should decide. It is "the intelligence", not "some abstraction", that should decide. He has been trying to write a play on this subject but, again, needs to find a metaphor.

Brian Clark is clearly his father's son. But as a child he was his mother's son and she was a "passionate, intelligent" woman extremely frustrated by her limited circumstances. There seems a dichotomy in almost all Brian Clark's main characters between the facade moulded by upbringing and the sensitive, imaginative, vulnerable individual underneath. This may reflect a division in the man who created them. He has undergone several upheavals in his life. He went to Nottingham University to read drama at the age of 27. He gave up teaching in 1970 to chance his arm on writing. He has suffered two broken marriages. But if there were no dichotomy, there would probably be no playwright.

The Sinfonietta delivered the symphony with their usual panache and crisp attention to detail. But although the work contains a number of interesting musical devices and some at times brilliant writing for sections of the orchestra, particularly the brass, it leaves the listener strangely unsatisfied.

The centrepiece was Britten's *Cantata Misericordiam*, a dramatic, almost operatic setting of the story of the Good Samaritan, with moving performances by Philip Langridge as the Samaritan and Stephen Roberts as the Traveller.

The Britten Tippet Festival continues until December on the South Bank and at the London Coliseum. Glyndebourne Touring Opera and the London Sinfonietta are on tour with Britten's *Albert Herring* in Oxford (October 25), Plymouth (November 1), Manchester (November 15). For a free leaflet giving details of concerts and talks, telephone 01-928-3002.

Philippa Davidson

Note: the address of *Chronica* (review, TES September 26) should read 119 Rosbury Avenue, London N17 9SE. Tel: 01-408 2766.

Flavour detectors

It's no coincidence, surely, that Jeffrey Archer's *First Among Equals* (ITV, from September 30) has started in the middle of the party conference season, or, perhaps, that the BBC has chosen this moment to give us its two-part adaptation of Hilda Bernstein's political thriller about South Africa, *Death is Part of the Process* (BBC1, September 28 and October 5). These are less obvious tie-ins than, say, evidence of a sudden interest in the Chinese peasantry before a Royal visit (*One Village in China*, BBC2, October 4), but our leaders still take such fictions seriously as opinion-formers. "Perhaps if we'd had that Falklands play," Norman Tebbit told David Dimbleby (THIS Week Next Week), BBC1, October 6, in answer to a question on Mrs Thatcher's image, "we'd have had the scenes that show her in that light" (as really a very caring person).

At the start of the programme, Dimbleby allowed him to get away with a good deal of condemnation of the Labour Party for being concerned only to put across a vote-catching image and disguise its hidden Socialist agenda. He might have pointed out that the later report from Tory Escher suggested that what worried the party faithful was precisely the government's failure to "get its message across" and the consequent loss of votes. Tebbit himself was not above concern for the party image and at "the generalized myth that the health service is worse, that education is worse". "We don't hear of the sheer joy of people going to the new hospitals that have been opened," you can never tell when the man is joking.

As for Jeffrey Archer's tale of political life, it did nothing to reinforce the view that MPs, from either party, devote themselves to public service to advance their deeply-held convictions. Archer is clearly a Militant entrant in the Tory ranks whose aim is to undermine faith in political establishment by presenting its representatives as ambitious opportunists prepared to sell their allegiance to anyone who will offer them a seat on the front bench. Redbrick (Channel 4, October 4), starting with the appointment of a new

politics lecturer at Newcastle University, looks set to give documentary support to an equally unidealistic picture of the academic world.

Like the sick who are inexplicably failing to express their sheer joy at the opportunity to try out the government's brand new operating theatre, food faddists tend to be less than enthusiastic about the ability of food technologists to engineer the flavours and textures that market research tells them we want. That excellent science series *Equinox* (Channel 4, October 2) illustrated the amount of dedicated effort that goes into supplying the needs of a population which no longer has meals, but indulges in "eating episodes", yet prefers "natural" products. We saw the creation of croissants, their rejection by the consumer, and their replacement by Mrs Potts's Wholewheat Snacks (alternatively titled "Crack-a-Snack" or "Mouse on Croûte"), a mixture of seaweed and locust bean gum disguised by "natural" flavours (something the Borgias could have put to good use). These food technologists had names like Jolly and Bacon, and there were times when I suspected that *Equinox* had its flavour-detector in its cheek, but you can't parody the food industry.

Hitchcock (Omnibus, BBC1, September 26 and October 3), receiving an award from the American Academy, did not need to pay tribute to his wife's cooking, but the programme failed to penetrate that protective armour. What it did was to show him a master of film language, fully conscious of how he achieved his effect, whatever the unconscious motivation behind the desire to achieve them. It was one of a number of interesting film programmes on television during the week, and film fans should also be delighted by BBC2's *Film Club* (from October 4), introduced by Derek Malcolm, which has the nice idea of pairing comparable films from different periods. They can't all be as good as *La Balance* and *Touchez pas au grisbi*, but there is still plenty to look forward to.

Robin Bus

She married him

Jane Eyre, Birmingham Rep.

Fay Weldon's adaptation moves smoothly and swiftly through the labyrinth of the story from Jane's childhood with the Reids and Lowood School (both taken as flashbacks) to the disturbing mysteries of Mr Rochester and his house, his rough declaration of love for Jane, their marriage abandoned in church for the "just impediment" of Mrs Rochester, Jane's flight and rescue by the Rivers family, and final reunion with Rochester, blinded but freed by the fire from his matrimonial shackles.

It says much for the narrative drive of Ms Weldon's writing (echoing that of Charlotte Brontë herself) and her vigorous dialogue that so much intrinsically melodramatic material can be compressed into a two-hour play without it descending itself into melodrama. It never does, but at times one feels aware that a staged representation of the most powerful moments in the story cannot rival the novel in

rousing our imaginations, though Ms MacNeil's multi-level set, with all Gothic walls enclosing a space, crossed with staircases which disappear up into the flies, is an exciting re-creation of the brooding house.

But what the play does, through the speech of its characters, is to pull out some of the underlying themes of the book which lie in the shadows of its magnetic love story: the powerlessness of women in Victorian society, the frustrating narrowness of their lives, the moral cant and hypocrisy (and the genuine martyrdoms of self) which were a product of the fierce religiosity of the age, and a final, moving eulogy on the experience of a happy marriage.

Ms Weldon weaves them firmly into the tapestry of the play, giving texture and substance to the plot. Birmingham Rep's new resident Young Company, under the direction of Derek Nicholls, do her justice with sparklingly talented performances, in particular from Tam Hoskyns as Jane, David Lansbury (Rochester) and Charlotte Harvey (Adele).

Ann FitzGerald

W H Smith gave themselves - quite justifiably - a pat on the back for their arts sponsorship this week at a special event in the Purcell Room in London. Besides their prestigious literary award, which has been made annually since 1959, there are numerous projects involving children and young people. The latest, which started in September, and was officially launched on Tuesday, is the National Theatre Education Department's W H Smith Interact.

The scheme will enable the NT to make available its expertise to schools and colleges by providing practical demonstrations, workshops, discussions, seminars and advice on request. The skills of technicians, playwrights, administrators, designers, fight experts and actors are already being put at the disposal of schools. "The phone book is stopped ringing," said Kevin

Cahill, Education Officer at the NT whose department mailed 4,000 schools in September. The other showcase project is the W H Smith/Royal Shakespeare Company Youth Festival which will take place for the fifth time in Stratford-upon-Avon between November 24 and December 7. This year's winners look especially exciting with workshops, performances, events for young people and a young writers' project. There will even be a chance to sample FitzGerald food.

Long-standing projects like the Poets in Schools scheme (organized by the Poetry Society), the Young Writers' Competition, the Young Music Cussion Concerts, the regional auditions for the National Festival of Music for Youth and the Young Concert Artists Trust continue as successful projects.

St Lucia bound

John Thieme on the Commonwealth Institute's Caribbean Focus '86

Ti-Jean and His Brothers, By Derek Walcott. Banjo Man, By Roderick Walcott. Commonwealth Institute Arts Centre Theatre.

At the Commonwealth Institute this month Caribbean Focus '86 builds to a climax with a theatre season which features three companies from the West Indies and a literature conference which runs from October 23-25. This brings together several of the region's leading writers, including Edward Brathwaite, Wilson Harris, George Lamming and Earl Lovelace. The theatre season kicked off last week with two plays from the St Lucian National Theatre. This week sees the acclaimed Jamaican women's collective, Sistren, performing a new reggae musical and the week after next the newly-formed Pan-Caribbean Theatre Company presents plays by Dennis Scott, Michael Lovell and Rawle Githons.

The St Lucian plays are by the two most influential figures in the development of the island's theatre, Derek and Roderick Walcott, who founded the St Lucia Arts Guild, from which the National Theatre grew, in 1950. Derek has gone on to achieve recognition as the Anglophone Caribbean's leading dramatist and one of its finest poets, while "Roderick" has produced a string of plays celebrating the folk customs of St Lucia, which, if less well known internationally, have secured his reputation at home.

Ti-Jean and His Brothers is already an acknowledged classic. On the surface, it is a fairly simple enactment of a tale which exists in many cultures: that

Malcolm Pierre (Gros Jean), Ruby York (Mother), Glen Charley (Ti Jean) and Michael Felix (Mi Jean)

of three brothers who must, one by one, encounter an elemental force of evil. In this version the brothers have to answer the Devil's challenge to make him feel anger without losing their own tempers. Gros Jean, the eldest, who relies on brute force, and Mi-Jean, the middle brother, who is captivated by rhetoric and philosophy, predictably, within the tripartite structure, fall. Ti-Jean (Little Jean) succeeds because he relies on instinct, common sense and the trickster attributes which, in the Caribbean, are most commonly associated with the folk-hero Anancy.

The play preserves the mythic quality of the legend, but invests it with layers of allegory. The Devil is identified with a white Planter and also with Papa Bois, a traditional figure representative of folk wisdom. The play is concerned with the dispossessed Caribbean peasant's fight for survival, but it also charts the movement to-

wards a post-colonial consciousness and the quest for a local tradition. This third level of allegory helps to explain why the Devil is equated with Papa Bois as well as the Planter; both are seen as exercising a stifling influence on the Caribbean imagination. Ossified folk wisdom is rejected, but myth is accepted as a legacy to be taken over and metamorphosed. So too are cultural influences as diverse as Greek and Elizabethan theatre, the Kabuki and local storytelling conventions.

A complex play, then, and a treat to see it staged in Britain. But it demands first-rate acting and direction, both of which are sadly lacking in this production. The individual performances are

energetic enough, but only Malcolm Pierre as Gros Jean and Ruby York as the mother of the three brothers carry off their stylized roles with conviction. The rest of the cast fight an uphill battle against the poor acoustics of the Commonwealth Institute Theatre and all too often resort to frenetic movement. Disaster is averted thanks to a musical score which just about keeps the momentum going, and costumes, staging and set design also help, but not enough to save the day.

In contrast the shorter *Banjo Man* is well done. A comic play which relies heavily on music, it lacks the serious impact of *Ti-Jean* and the company which are sadly lacking in this production. The individual performances are

carnival mood. Its subject is the La Rose Flower Festival, a traditional St Lucian folk observance, held every August in honour of St Rose of Lima, first saint of the New World. Thus, like most things in this predominantly Francophone island, it has its origins in Catholicism, but the feast is a secular one characterized by drinking, dancing, marching in the costumes of royalty and a good deal of bawdy song. Estephane, the banjo man of the title, is a Dionysian figure who travels through the island, playing his instrument (in more senses than one) and composing teasing extempore songs wherever festivals are held. The part is brilliantly played by Egbert Mathurin, but *Banjo Man* relies on successful ensemble playing and all the cast turn in fine performances, aided by the first-rate score by Charles Cadet (currently St Lucian High Commissioner in London).

The Caribbean Theatre Season continues with *Sistren* performing until October 12 and the Pan-Caribbean Theatre Company from October 21-26. Details and tickets from the Box Office, Commonwealth Institute, Kensington High Street, London W8 6NQ. 01-602 8588.

Ti-Jean and His Brothers is available in Plays for Today, edited by Errol Hill, Longman.

For further details of the Caribbean Writers Conference, contact Indira Naudin on 01-603 4535, ext 267.

Five new titles have appeared in the Longman Caribbean Writers Series. Trevor Rhone's plays *Two Can Play and School's Out*, Edgar Mitchell's Guyanese ghost-story *My House and My Fate*, and Roger Mais' *Lies, Lies, Lies* and other stories all published at £2.50 each. Orlando Patterson's *The Children of Sisyphus*, one of the first serious fictional portrayals of the Rastafarian community, and George Lamming's *In the Castle of My Skin*, a much-praised first novel about growing up in colonial Barbados, are published at £2.95 each.

Education for Capability

Royal Society of Arts
8 John Adam Street
London WC2N 6EZ

Recognition Day

OPEN AFTERNOON
FRIDAY 17 OCTOBER 1986, 2.00 - 4.00 PM

Programmes which have demonstrated that they help people, whether school pupils, students or adults to learn how to live and work more effectively will receive Recognition at the Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA) under the 1986 Recognition Scheme for Education for Capability on 17 October.

Anyone interested will be very welcome to attend the Open Afternoon.

Pupils/students of these programmes together with their organisers will be presenting an active exhibition of their practice. Presenters: The 'Profile Course', Castleford High School, Wakefield. The 'Sixth Option', Hamilton School, Leicester. The Nursery Class, Hummersea Primary School, Cleveland. Drop In Skill Centre, Nelson & Colne College, Lancashire. Diploma in Management by Self-Managed Learning, Department of Management Studies, North East London Polytechnic. Transition to Adulthood, Queen Elizabeth's Foundation for the Disabled, Banstead, Surrey. An 'Alternative Curriculum', Sutton High School, St. Helen's, Lancashire. The Graduate Enterprise Programme, St. David's University College, University of Wales, Lampeter.

Further details from: Janet Jones, Education for Capability, Royal Society of Arts, 8 John Adam Street, London WC2N 6EZ. Tel: 01-930 5115 ext 215

Fact and fiction

Under Exposure, Theatre Foundry, St Thomas' R C Church, Walsall, Walsall. Food For Thought, Big Brum TIE Company, Salfrey School, Birmingham.

Dramatic juxtaposition of fact and fiction is used to good effect in both these productions to highlight the individual suffering that lies embedded in terse news reports and other documentary evidence, current or historical.

In *Under Exposure*, we watch news-reel film of police raids on black shanty towns in South Africa; bulldozing ramshackle huts, dispersing "illegal squatters" with dogs and teargas and transporting the women and children to the homelands, while at the same time living through the harrowing experience of such events with Mama Rejoice, her young daughter Nompoti and grown-up niece Tokko.

Fragmentary in structure, the play (written by Lisa Evans for Theatre Centre in 1983) is in many ways a series of images and "shots" which photographically snap up and snap up the impressions strongly on the mind's eye: an image of the women trekking, bearded on their heads, across the unfamiliar "home" lands, the crumpled heap of debris that was once a home, the pile of domestic possessions hidden clumsily under a polythene sheet for the family's intended return, all add up to a painful sense of the

seemingly eternal disruption of these people's lives.

Similarly disheartening are the letters of Sir Charles Trevelyan, First Lord of the Treasury in 1845/46 who, while a million people in Ireland were dying in the potato famine, advised H M Government to leave things to natural forces to sort themselves out, averting that "cargoes of corn heading for Ireland are no longer needed". Meanwhile, we watch the young Heggertys and their first baby slowly losing ground in the battle to stay alive.

The half-hour play forms the middle section of a three-part project on food throughout the world. Richard Brown and Alison Belbin are admirably versatile in portraying a variety of roles, from snappy cartoon cameos of food conscious types (fadist, gourmet, vegan etc), in which a lot of factual information is conveyed very quickly, to the serious drama of the play itself.

But there is a limit to how many people actors can convincingly portray at any one time, and this play would have benefited from one more person in the cast to let the Heggerty characters develop.

Theatre Foundry with regular grants from both Walsall and Dudley Education Authorities can field four actors while, by contrast, Big Brum, providing material of equal quality but with only ad hoc funding from a variety of charitable and community schemes, are down to two, with a diminution in the power of the play.

Ann FitzGerald

Among this week's contributors:

Gerard High is head of Henry Belairs Middle School, Bedford, Warwickshire. Cheryl Hooks is assistant county librarian for Berkshire. Frances Bull is the author of *Out of the Past*, published by John Murray.

R C Richardson teaches at King Alfred's College, Winchester. Dr John Thieme is a lecturer in the department of Language and Literature at the Polytechnic of North London.

Celebrating Britten and Tippett. Morley College/ South Bank Centre. Concert by the London Sinfonietta (conducted by David Atherton). Royal Festival Hall, October 2.

Students at Morley College had the

EA EDUCATIONAL TRAVEL ABROAD

by the small group specialist All year round for schools, youth groups, students, orchestras, teachers, Discover the Hague, the Rhineland, Paris, Vienna, Munich. Experience a French town in Brittany, Auvergne or Picardy.

Do call us for your next group.

Also short term courses for individuals in France/Spain/Germany/Italy - All levels. All year - All ages

Euro Academy Outbound (TES) 77a George Street, Croydon CR9 1LD Tel: 01-601 28058. ASTA 6910X

10/86

RESOURCES

Under the microscope

VIDEO
The Biochemical Basis of Biology
Tape 1: Cell Structure and Energy
Production
VHS or Betamax, £25
Department G, The Biochemical Society Book Depot, PO Box 32, Commerce Way, Whitehall Industrial Estate, Colchester, Essex CO2 8HP.

Today Biochemistry plays a much more important role in the advanced Biology syllabuses. It is not an easy area to illustrate - and teaching it can easily degenerate to listing formulae and memorizing equations. This video, the first of a series, is aimed at helping teachers make the subject more interesting and more understandable.

There are four sections of about 15 minutes. In the first, "The Electron Microscope", the problem of resolution in microscopy is introduced. It clearly illustrates that the use of a light microscope beyond certain definite limits does not increase magnification of detail, and discusses the basic principle by which an electron microscope works. It also demonstrates very clearly how such a microscope works and the procedures necessary before a specimen can be examined. Techniques such as negative staining and shadowing, freeze fracture and freeze etching are described.

"Subcellular Fractionation" explains that, however good your microscope is, it is impossible to see how a cell works. One way to explore cell functioning is to separate the different cell organelles and then study how they operate. The isolation of mitochondria from a piece of liver is illustrated. The value of such work in identifying the functions of cell organelles is brought out in the third section on "Mitochondrial respiration, the oxygen electrode". The work of the mitochondrion in breaking down nutrients to produce ATP is discussed. This involves the citric acid cycle and an electron transport chain. Mitochondria are isolated from cells and with a suspension of the organelles uptake of oxygen can be studied, using an oxygen electrode. The setting up of such an electrode is shown and its operation simply explained. An investigation into oxygen uptake is then demonstrated and the results displayed on a chart recorder and interpreted by the commentator.

The last section looks at the process of photosynthesis. It starts very simply by explaining its importance and demonstrating how to test a leaf for starch. It continues by investigating the properties of isolated chloroplasts and demonstrates a Hill Reaction. A study of such a chloroplast suspension is demonstrated and their functioning followed, using an oxygen electrode. The concept of the two photosystems is developed and the programme ends by demonstrating it.

This video succeeds admirably in achieving the aims of the producers. The sections are not intended to support each other directly, but it is interesting to see how one builds onto the next. The quality of presentation is high - close-up sequences are very clear and some are especially dramatic. The commentary is clear and spoken slowly. A useful short set of background notes, with appropriate references for further reading is supplied, but before students see it, teachers should check on the vocabulary used in the programme. Some background knowledge will be essential if students are to get the best out of this excellent production. It could be used with OCR advanced level students in schools and colleges, but would be more suitable for those on HNC and TSC courses, or even first-year university students.

John A Barker



Full of promise

Anders Hansen argues that television glamorizes images of alcohol for young people

Widespread under-age drinking and increases in the number of under-age drinkers convicted for drunkenness raise questions about the social pressures on young people to drink. Concern about the role of television and other mass media in influencing young people's views of alcohol has traditionally focused on advertising. Yet, persuasive, glamorous and full of promises as they may be, alcohol advertisements account for a relatively small proportion of the overall images of alcohol on television.

In our research at the Centre for Mass Communication Research at Leicester University into television and alcohol, we found that over a two-week period alcohol advertisements accounted for just over half an hour during peak viewing time. In comparison, in drama and entertainment programmes, scenes showing characters drinking alcohol totalled some 13 hours. In sheer quantitative terms, there can be little doubt that the messages communicated to viewers about alcohol go well beyond those of advertising.

This suggests that if we are to understand the role of television in influencing young people's beliefs about alcohol, we need to look at the images and information which television as a whole makes available to viewers. The most striking finding from our study of television images of alcohol was not so much the frequency with which consumption is shown, particularly in popular serials; rather, it was the narrowness of the range of alcohol images. Generally, alcohol and drinking on television are shown as pleasant and unproblematic, and as a natural aspect of social behaviour. There is relatively little portrayal of the potentially harmful and dangerous consequences associated with alcohol. Images of alcohol abuse or addiction remain few and far between.

The possible significance of such findings becomes clearer when seen against the background of preliminary results from a second part of our research, consisting of a survey of 349 youngsters, aged 12 to 17 years, and selected from schools in and around Leicester.

When asked about their recall of programmes on alcohol-related problems, those who could recall having watched any, referred to television drama serials as often as documentaries and news programmes. This should not be taken to mean that young viewers cannot distinguish between factual programmes and fiction on television, but it does suggest that how alcohol is portrayed in popular television serials and other television drama should not be dismissed as

irrelevant to young people's learning about alcohol. The extent to which a clear and conscious distinction between fact and fiction is made when it comes to glean information about alcohol use and abuse is a matter for further investigation. The crucial point is not necessarily the frequency with which alcohol consumption is shown in such programmes, but rather that the images of alcohol on television fall within a narrow range and fail to explore the multiple uses, consequences, and risks associated with drinking. Overall, less than 40 per cent of the young people we interviewed could in fact remember having watched any programmes about alcohol-related problems. The same was true for programmes about the effects of smoking. In sharp contrast, over 80 per cent could recall programmes about drug abuse.

While recall of programmes about drugs centred on a relatively small number of titles, it would be a mistake to attribute the marked differences in recall between alcohol and drug programmes to the "effect", "catchiness" or "quality" of individual programmes. Rather, it seems that the explanation should be sought in the overall prominence and weight given to the drugs issue, not just in the news media, but in politics and public debate generally. This prominence is brought with it a heightened sensitivity among young people to programme material about drugs. In this sense the finding confirms the conclusion from other studies of television that what viewers "get" from TV cannot be understood in isolation from the social climate of opinion by which issues such as alcohol and drug abuse are circumscribed.

In research on the effects of television it has generally been argued that its main effect seems to lie in its ability to contribute to the raising of public awareness about issues. One way of studying the possible contribution of television to awareness of substance abuse and other health-related problems is to compare so-called heavy viewers, those who spend a relatively large proportion of their time watching television, with light viewers. First indications from our survey of young people show that in terms of overall awareness of health problems, heavy and light viewers differ relatively little.

In response to an open-ended question, asking the respondent to name the main health problems facing people today, the most frequently mentioned were (in order) smoking and smoking-related diseases, cancer (mostly breast), and other television drama should not be dismissed as

diet-related problems, AIDS and other sexually-transmitted diseases. Of these, smoking and smoking-related diseases were mentioned by over half of the respondents, alcohol abuse by just under a third, and AIDS and other sexually-transmitted diseases by just over a tenth. Interestingly, and maybe to the encouragement of school health educators, these responses appear to have more to do with the school health education curriculum than with the "television curriculum". In a more focused follow-up question asking the respondent to name the two most common health-related problems from a list of six, alcoholism was mentioned by just under a third of all respondents, and with no significant difference between light and heavy viewers. This question, however, brought out an important difference, which was not revealed by the previous open-ended question. It showed that heavy viewers were significantly more likely than light viewers to name drug addiction as a "most common problem".

The indication from these questions is that there is a generally high level of awareness among young people of key actual and potential health problems. Amount of exposure to television seems to make little difference to the way in which respondents rate various problems associated with substance use and abuse, with the one crucial exception that heavy viewers seem to be exceptionally sensitized to the problem of drug addiction. It is tempting to argue that the media prominence given to drug issues during recent years may have contributed to this difference between heavy and light viewers.

It is equally relevant to focus on the lack of difference between heavy and light viewers in their perception of the prominence of alcohol-related health problems, and to see this as an indication that television, through its portrayal of alcohol consumption as largely unproblematic, has failed to make any significant contribution to young people's awareness of the potential problems associated with alcohol consumption. The key question to ask about the influence of television is not whether it "causes" non-accidental drinking patterns in young people, but rather whether it fails to reinforce the messages which teachers and health educators are trying to put across to young people about sensible drinking and the possible risks associated with drinking alcohol.

Anders Hansen is a Research Associate at the University of Leicester. The "Alcohol Education and Research Council" and The Brewers' Society have supported the work on which this article is based.

OPEN TECH

The National Extension College's Open Tech Directory is a new guide to open learning. It contains over 800 Open Tech courses and modules, materials and facilities available from about 20 new projects, together with facilities and services offered by practical training and support services.

The entries are split into broad subject categories and arranged alphabetically. The Directory is available from Marketing Department, National Extension College, 18 Brooklands Avenue, Cambridge, CB2 2HN, price £9.95.

PUZZLES

A new range of jigsaws has been produced by Mandolin Puzzles. The puzzles cover British History, from the Stone Age to the present Royal family, as well as the Second World War and a view of London, from Portobello Road to Petticoat Lane. They are available in two versions - 1,000 pieces in European Green board or 800 pieces in hand-cut 4mm plywood. Prints of the puzzles are also available as posters. For further details, contact Mandolin Puzzles, 9 Eila Street, Islington, London N1 8DE.

GYMNASTIC CARDS

Thirty-three illustrated teaching cards are now available for PE teachers. They are aimed at classes of seven to 12-year-olds and intended for use as a supplement to teacher training. The cards are available from TBI Book Service Ltd, 17-23 Nelson Way, Tuscan Trading Estate, Camberley, Surrey GU15 3EU, price £7.50.

SHAKESPEARE

The British Universities Film and Video Council has published a catalogue containing some 380 programmes designed to bring together information on material which is available for hire or sale within the UK, for students and teachers of Shakespeare.

The catalogue includes full-length performances and critical interpretations of the plays, and includes films inspired by Shakespeare's plots and characters. There are films designed to interest younger audiences and teachers in secondary education.

The catalogue is available, price £5 to members of BUFVC and £9.50 to non-members.

LEARNING BY PLAY

To a small child, play is work. It is in the mind that Nursery World, the Play Board and Fisher Price Toys have got together to produce the "Learning by Playing" booklet, which is primarily a guide to play for professionals. For further information on the booklet contact Sally Emms on 01-634 1000.

GULLIVER'S TRAVELS

The BBC production of Jonathan Swift's "Gulliver's Travels" is now released on video. Entitled "Gulliver in Lilliput", it tells Swift's tale of the adventures of Lemuel Gulliver, the 18th Century ship's surgeon from Wapping.

The video is available from BBC Enterprises Limited, Woodlands, 80 Wood Lane, London W12 0TT, price £24.95.

DRIVING TEST

The Department of Transport has launched a new driving test video called "The End of the Beginning". It sets out to explain the reasons for having a driving test and its relevance to modern driving conditions. It also includes basic manoeuvres in test and traffic. Aimed at young potential test candidates, the video emphasises the need for further training for a lifetime of safe driving. It is available from CFI, Visions, Chalfont Grove, Gerrards Cross, Bucks SL9 6TN, price £9.99.

notes

The pack, *Auschwitz: Yesterday's Racism*, as published by the London Auschwitz Education Committee, coincides with the 1983 Auschwitz exhibition. In 1985 the ILEA took over the marketing of the classroom pack and added their own booklets including a Teacher's Guide, but in July this year was withdrawn for revision, following objections by Baroness Cox and Lord Harris about the linking of the death of millions of Jews to the prevention of Terrorism Act. Below, Jessica Yates, a former ILEA school librarian, expresses her longstanding concern about the pack.

Now that the strong feelings aroused by the 1983 Auschwitz exhibition have settled and the pack on *Auschwitz: Yesterday's Racism* has been withdrawn, the time seems right to analyse its political bias.

The most serious problem is bias by omission, which as Gillian Klein says in *Reading into Racism* is the hardest to detect. The most obvious and inexcusable omission is on page 1.5 of the pack. The Rise of the Nazis, Basic Facts. The entry for 1939 reads: "1939 March: Germany occupies the rest of Czechoslovakia. September 1: Nazis invade Poland. September 3: Britain and France declare war on Germany."

Wasn't a Nazi-Soviet Pact of August 23 1939 a basic fact in the rise of the Nazis. It was in fact a necessary prelude to war: Britain had promised to declare war if Hitler invaded Poland. Hitler needed to make a treaty with Stalin before the invasion, to ensure that the USSR would not fight back. They partitioned Poland between them. On September 17th the USSR invaded eastern Poland, and shortly afterwards Molotov announced: "The Polish State and its government has virtually ceased to exist."

There is only one reference to Stalin in the text: "In 1917 there was the Russian Revolution... Many Jews looked towards socialism as a way of ridding the world of racism and religious persecution. For a few years hopes were high but Stalin's counter-revolution and the murder of the Bolshevik leaders who opposed him put an end to such hopes (2.3)".

Is this true? What a lot it leaves out, and how peculiar to describe the Stalin as counter-revolutionary! Stalin's role in manipulating the German Communist Party is also omitted: "The socialist and communist parties wasted much time arguing with each other..."

In the pack, "holocaust" and "genocide" are defined, and we are told that "Nazis" are defined as "National Socialist German Workers' Party (Nazi) and Nationalsozialistische Arbeiterpartei (NSA)". One very important term, "fascism", is never defined.

notes

DOMESDAY MAPS

A set of maps drawn by a retired helicopter pilot shows England as it was in 1086. The ancient spelling of place names may look strange, but most are recognisable and the relevance of the Book is at once obvious.

It is not difficult to guess that Woolwich was once famous for its wool, but the citizens of Bromley might be surprised to learn they are living in "a clearing in the broom" and those of Orpington that they are living in "the home of Orped's people".

The series is the result of six years' work by John Garmons Williams, who has combined information from the Domesday Book with the geography of our own time in a way not previously attempted. It reveals the faces of early Norman England for the first time; a master map shows the land governed by William, including Normandy, and there are 43 county maps of the Book.

A dozen of the maps are in two sizes, the larger measuring 19" x 14 1/2", and the smaller 12 1/2" x 9 1/2". Prices are £5.99 and £4.99, plus 50p for postage. From Garmons Williams Publications at Hardwick Stables, Hadden, Staveley, Derbyshire S43 1JY.

RESOURCES

Bias by omission?



Adolf Eichmann b. 1906 Solingen, son of a clerk. Ordinary Protestant family. Moved to Linz, 1928-1935 worked as a vacuum cleaner salesman. Joined S.S. 1932, served in Dachau and in 1934 volunteered for S.D. Worked under Heydrich in Reich main security office in Berlin in charge of Bureau IVA, 4b, R.S.H.A. Became the nerve centre for Jewish extermination. Told by Heydrich to eliminate Jews. Masterminded the gas chambers and crematoria. Escaped after the war to South America.

Above: The Auschwitz pack (1983)
Left: Churban, T Bayfield (1981)
Centre: Eichmann on trial in Jerusalem

by Jessica Yates

and Stalin's victims were mainly "ideological opponents". From Leo Kuper's two books (*Genocide*, Penguin 1981; *International Action against Genocide*, MRG 1984), I learned the full UN definition of "genocide", and of many examples, recent and contemporary included, which convince me that although "The annihilation of Jews was a most complete realization of the annihilation of the people as such", mass murder with intent to destroy a part of a group in order to dominate the rest, also counts as genocide. The UN definition is restricted to "national, ethnic, racial or religious groups" but the original draft had "political" as well, to be excised after lobbying from the Soviet delegation.

Kuper has a chapter on comparable political atrocities: they include Stalin's purges and the Pol Pot massacres in Kampuchea. Stalin is also guilty of deporting enclaves of ethnic minorities in the Baltic States; and the Ukrainian famine when 5 million, including 1 million children, were deliberately starved to death. So comparisons between the two dictators are legitimate.

The pack summarises the fate of other victims of Hitler's racial doctrine - the Gypsies (see 11) and the Slavonic peoples. Several features of Polish suffering are described: deportation of workers as slaves; extermination of the educated, politically active part of the population; kidnapping of thousands of small children for adoption into German families. Ultimately the Polish speaking nation would have disappeared, although (unlike the planned fate of the Jews) many individuals would have survived, as Germans, or slaves. This would

be "freedom" in our society? Make a list of the things you think you are free to decide yourself. Which of those "freedoms" would a fascist government remove?

Yes, it is true that a fascist government would remove many of our freedoms - but so would an extreme neo-Stalinist or Maoist. The deeds of totalitarian governments are very similar in practice, even to the dehumanisation and mass murder of target groups and their children.

In an exchange of views in the letters pages of ILEA Contact last autumn, the apparent reason why comparison of Hitler with Stalin was considered irrelevant, was that the pack was concerned with racism and genocide.

CBI BOOKLET
The Confederation of British Industry has published a booklet for businessmen, teachers and lecturers who give talks to school children on management and business environment. The booklet is in the form of notes and visual aids and is aimed at giving the students an insight into how a company is structured, its method of operation and roles and responsibilities of its managers. It is available from CBI Publication Sales, Centre Point, 103 New Oxford Street, London WC1A 1DU, price £4.00.

Quite suddenly, it seems, for a variety of reasons, not all of them legislative, school governors have been urged to increase an increase in training courses and support material for governors. The demand is certainly there - like most heads, I have been deeply impressed by the eagerness of new governors to equip themselves properly for their task - and courses are invariably oversubscribed.

Clearly, heads can help not only by pressing their I.E.A.s for more governor education, but by helping their own governing bodies to set up self-

FILM LIBRARY FOR TEACHER EDUCATION
The Film Library for Teacher Education is now to make its materials available for wider use. Teachers' Centres and Local Education Authorities will be able to borrow films and videos for a membership fee of £50 and a hire charge of £15 per item, from the Library's wide range of teacher education material available for in-service training which is constantly updated and not readily available elsewhere. The Library will continue to offer its main voucher scheme of membership which gives major users the advantage of even lower costs. Further details of both schemes can be obtained from the Managing Officer, F.T.E. The National Audio Visual Aids Library, The George Building, Normal College, Bangor, Gwynedd LL57 2PZ.

Cancer Around The World
"Causes and Prevention"
Wallchart and booklet £5. Booklet also available singly at 50p (inc p&p). Cancer Research Campaign, 2 Carlton House Terrace, London SW1.

Years ago, if someone had cancer it was rarely mentioned by name. Discussion of it was usually hedged around with euphemisms and the whole thing often had something of an air of mystery. Fortunately, in recent years things seem to have changed. Cancer has to a great extent been demystified and this must be largely due to the work of the Cancer Research Campaign.

Higher profiles

help training sessions. One way of doing this would be to convene a meeting to present governors with training material and simulated problems. Page One provides this.

There are six units, each offering ideas and materials for a two-and-a-half-hour session. The units cover all the areas in which governors may become involved during their work -

PARENTS AND GOVERNORS

Cancers

In terms of both cause and treatment. Did you know, for example, that India has the highest rates of oral cancers, where they account for almost one-third of all types? Tobacco smoking is a major cause, as is the chewing of betel-nut or leaf, with tobacco and lime. Cancer causes one in every five deaths in the West and one in every 16 in the developing countries. Research is providing important clues about the causes of the different types, and although some are caused by viruses, many are clearly linked to diet and tobacco. Information and materials for training sessions. One way of doing this would be to convene a meeting to present governors with training material and simulated problems. Page One provides this.

evidence of attacks on Asians, which, from what I've read, do indeed resemble the persecution of Jews in the early days of Hitler's rule.

The emphasis shifts in the Teacher's Guide. Whereas the pack's message is: don't join the NF and don't vote for them; according to the Guide we have already elected a sinister government. No wonder Baroness Cox, speaking in the House of Lords, complained of references to "anti-trade union legislation...the behaviour of our police on picket lines and with the GCHQ issue."

At least we have a reference to the USSR, in the context of "on-going cover-ups...the reporting of dissonance, religious persecution, crime statistics and alcoholism..." (the nearest we get to discussing Soviet Jewry). And although the Guide recommends looking at the work of Amnesty etc., I fail to find a reference to Hitler's worst legacy, the continuing civil war in which the USSR portrays itself as still under threat from invasion, which has led to the nuclear arms race, the threat of World War III, and the ultimate genocide.

Nor is the founding of Israel mentioned; you wouldn't know that Israel didn't exist until after World War II. Rabbi Bayfield's school textbook *Churban* (1981) handles this much better: pupils are even asked to debate the Arab Case v the Zionist Case. It is intriguing that when the pack's compilers reprint Bayfield's spottier biography of Eichmann, they end it with his flight to South America, deleting the concluding sentences about his trial and execution.

I suspect that in order to convince teachers that the Holocaust "should...take its long overdue place on the curriculum", the compilers were less concerned about those who had misgivings about the horror of the subject, than the few (though influential) "anti-Zionist" left-wing teachers who don't want to teach children about Stalinism and other failures of socialism (like Poland itself); but would teach the Holocaust as if it were firmly grounded in a context of racial prejudice in modern Britain (with not a word about Soviet Jewry).

ILEA is not to blame for the bias in the original pack, but for inadequate supervision of the revision. Baroness Cox was more concerned with protecting her government's record, than with checking historical bias. Whether or not the pack is revised, it would be possible for individual schools to revise a word or two, or produce extra home-made pages e.g. on totalitarianism. Finally, it should be an exceptional request that users of an educational resource with political implications be informed of the qualifications and educational experience of the compilers.

Although teachers are free to choose the context in which they use the pack, the compilers urge it to be related to anti-racist policies. The Teacher's Guide pre-emptively studying other tyrannies by listing for teachers, some of whom will not be history specialists, eleven topics related to the Holocaust, e.g. "migration and settlement" - but you will look in vain for "tyranny and dictatorship".

In the modern section of the pack, the compilers, following the line of the London Auschwitz exhibition, concentrate on the rise of the National Front. Here I would suggest this section be updated with more recent

finance, curriculum, i.e. disciplinary procedures, staff selection - and are comprehensive, yet flexible enough to be modified to the needs of a particular school. The package consists of a collection of loosely bound A4 sheets which can be copied.

This is a very useful pack. It provides, particularly, a means whereby a head can offer positive help in circumstances where governors are crying out for it.

Governing bodies are, by design, heterogeneous and widely representative. It is right, therefore, that governor education should be provided in a number of ways. In Leicestershire, for example, the Workers' Educational Association provides, as an independent body, a course of governors within the county, and there are many other initiatives around the country. One thing is clear: seen in this context, but it can get governor education started in your own school next week.

Gerald Haigh

This excellent new wallchart, from which these facts come, shows the world distribution patterns on 12 of the commonest types of cancer. Information is given about each, including what is known about its causes. The map and booklet together could provide a starting-point for extremely worthwhile work in several subject areas in the secondary school - science, geography, general studies - and in many health-related courses in further education. If we are interested in getting across the concept of prevention to young people, this map will be a valuable tool.

Information and materials for training sessions. One way of doing this would be to convene a meeting to present governors with training material and simulated problems. Page One provides this.

MEDIA

The child's perspective

David Self looks at an introduction to using written and spoken language

SCHOOLS TELEVISION
Talk, Write... and Read.
ITV Central, alternate Wednesdays
9.42am; repeated intervening weeks,
Thursdays 11.2am.

In the Playground is a delightful film, definitive yet open-ended. Delightful because in its brief 15 minutes it captures exactly the mood, the multifarious activities and coldness of a winter morning's break in a typical suburban primary school. There is the lone, passive against the wall; playground games interrupted by a stray dog; teachers sitting in a row in the staffroom, with one poor soul on duty outside, hands clutched around a coffee mug. The film is also open-ended, acting as a marvellous stimulus to creative follow-up work.

Directed by John Prowse, it has been the highlight so far of Central Television's brand new English series, *Talk, Write... and Read*. Made for the seven to nine age group, it is intended to introduce children to different ways of using both spoken and written language. It sets out to achieve this and to improve its viewers' mastery of language by concentrating on the interests of the age group. Both the director and the producer of the series, Graham Scollars, seem to have a happy knack of pin-pointing those interests and making films that come very close to showing the world from an eight-year-old's perspective.

The first programme, for example, had the ubiquitous Michael Rosen (in good form) talking about his way of writing. From note-making at the back of a bus to scribbling in a park, he both demonstrated a useful way of working and constantly reminded his viewers of what they have experienced and how they can use that experience in their own writing.

The programme was also valuable in that it showed something that this age group is often not aware of - the fact that adults write. Writing is not simply a classroom chore. *Rosen's Writing Guide* also brought us a splendidly-acted film of a new Rosen poem about babysitting, which is certain to become a classic.

The third programme is a drama, *Old Mrs Shanton*, and will be transmitted on October 15, 23 and 30 (half-term repeat). Again, it takes a well-known theme. A quartet of children come to believe that an old house within a walled garden is the home of a witch. One of the girls in the group emerges as the natural, braver leader and eventually comes face to face with the woman, only to find she is actually a friendly old lady.

In some ways the plot is a little thin and the script demands reaction, not action, from the child actors - something notoriously difficult to get right in the disjointed business of location filming.

What makes the film particularly useful, however, is that the making of



it becomes the subject of the next programme in the series. *Media: Programme Choices* sets out to show that "television programmes don't just happen - they are the result of conscious decisions". It perhaps packs too much information into its 15 minutes for many seven-year-olds to

absorb. It is, nevertheless, a most welcome contribution to the growing bank of resources for primary media education. It will prompt many children to ask and even answer the question they all too rarely ask about what they see on television: "Is this real?"

Behind the brick

Redbrick
Channel 4, Saturdays 7.30 pm.

"Not even redbrick but white tile" was the way Jimmy Porter's university was described in *Look Back in Anger*. In Tyne Tees TV's look back over the year at Newcastle University, some-one rummages on the preponderance of plate glass as a building material. The metaphor is the same in any event. An antidote to the dreary spires image that we got in last year's BBC documentary about Queens' College, Cambridge. What we are promised is a peep behind the glass, tile or brick.

The events in the first programme don't reveal much. We are shown two undergraduates preparing to leave home and then arriving on campus, interest with the selection process for the new person to teach European politics. This is required viewing for potential politics lectors: one, don't admit that you are interested in anything as nebulous (or boring) sounding as "the influence of sub-national governments in the policy making process in amorphous policy areas"; two, write punchy headlines for academic work like "The Death of Working Class Politics in New Zealand"; and three, subtly offer titles to senior academics by allowing them to read work in progress. "I may well be wanting to do a little intellectual

plundering", says a senior lecturer of the successful interview candidate's incomplete thesis, quietly rubbing his hands.

All this is very weighty and polite, but understated. A lot of it isn't very interesting, though. We're kept discreetly but forcefully out of the formal interviews and are expected to savour the peripheral chitchat - fine for 2CV-owning, Posh Simmonds-reading, Channel 4-watching BA baby boomers, but for those who never went to university and want a clear picture of what really goes on - perhaps because a son or daughter has just gone up - Redbrick's first episode is a little dense.

What's more, there are no expensive historical backdrops, rich plumy voices, flanking sherry glasses or sense of exclusivity to divert you when the academic going gets tough. By the end of the first programme I was fantasizing about the entry of a character from the fictional world of Bradbury or Lodge - or even a guest appearance from the ubiquitous professor, Laurie Taylor, just to perk things up.

To be fair, while Redbrick seems to have got off to a crumbly start, it does promise more controversial material as Newcastle University tries to slug it out against the cuts.

Nick Baker



A peep behind the redbrick at Newcastle University

briefings

radio & tv

For schools

INDUSTRY YEAR

(Monday-Wednesday
00.30 VHF4)
Glyn Worsnop visits six industries including IBM, Lloyds Bank, British Aerospace and a small Yorkshire cooperative bakery to look at the problems they have faced in Industry Year. Thirteen to 14-year-olds are asked to find possible solutions.

ENGLISH TIME

(Tuesday, 13.33 BBC2)
The second episode of "Buddy", adapted from the teenage novel by Nigel Hinton and starring Roger Daltrey as Buddy's wayward, teddy-bear Dad. Here 14-year-old Buddy is worried about why his mother has left home and what his Dad's new lucrative "job" actually is.

SECONDARY ENGLISH: 11-14

(Thursday, 9.30 VHF4)
Auntie about the poetry of Africa begins with an anthology of both poetry and prose from the North African deserts. Includes the description of the death of a young British soldier sent to Somalia to lead a peace-keeping camel force.

TALKS TO A SPORTS STAR

(Thursday, 10.25 VHF4)
Bob Wilson introduces Adrian Moorhouse, who answers questions on swimming for nine to 12-year-olds.

HIGHER EDUCATION

(Thursday, 11.18, Fri 9.30 BBC2)
Aimed at those students preparing for entry into university, "UCCA and After", gives advice on how to apply, what to apply for, how to prepare for an interview and what the first year of undergraduate life can be like.

WAVELENGTH

(Thursday, 11.30 VHF4)
This teenage magazine programme, introduced by Terry Christian, looks at discipline. Is self-discipline enough?

NEWSCAST

(Thursday, 14.00 VHF4)
A visit to Manchester Grammar School where 16 to 19-year-olds and specialists discuss the role of the press.

SECONDARY SCIENCE

(Thursday-Friday,
00.30 VHF4)
A short series of four programmes, two of which are radiovision, form a unit on "Energy". Fourteen to 16-year-olds discover the amount of energy consumed and the fuels used now, before considering alternative sources.

ENGLISH FILE

(Friday, 12.00 BBC2)
"Away from the Front" is a programme for 14 to 17-year-olds about the way wars affect civilians, both those left at home and those who have the misfortune to be in the path of warring armies.

Continuing education

BUONGIORNO ITALIA
(Sunday 10.55, BBC1; 17.30 VHF4)
A repeat of this multi-media beginners' course in Italian. Provides both an insight into the country via documentary film and language work on basic everyday situations.

MICRO LIVE

(Friday, 19.30 BBC2)
These new programmes give emphasis to the use of computers in small businesses. Case studies demonstrate the advantages and pitfalls of installing a microcomputer at work.

A fair hearing



When Kathleen Cox decided to admit to partial deafness she found millions of fellow sufferers, including many teachers

Although the medical description of my hearing loss is "mild" it doesn't feel mild to me. I decided to "come out", and stop pretending that my difficulties didn't exist and gave a talk at a conference on integrating children with special needs entitled "Integrating Psychologists with Special Needs".

Though the preparatory notes for my session did indicate that the special need under consideration was a progressive hearing loss I was, nevertheless, surprised to find that the front rows had been occupied first. Those attending were principally other psychologists with hearing difficulties. They appeared to find relief in the experience I described: experienced which were almost entirely my own as I could find no literature on the psycho-social consequences of progressive hearing disorders.

When the proceedings of the conference were published I began to receive letters which included phrases like "You have made my day". Towards the end of my article I was smiling to myself wondering whether in fact you were writing about me. "Please could you give me any references you might have found, especially with regard to increased irritability with fellow human beings".

As there are some 2,500,000 adults in Britain today suffering from acquired or adventitious hearing loss, and one in three who experience difficulties with hearing at the theatre or in church, with an ageing population, teachers as well as psychologists must be among those affected.

Some might identify with my experiences at work and at home and be encouraged to share the relief of coming out of the closet. A former colleague of mine said, "I wish you'd said so earlier. It would have saved me the embarrassment of complaining - 'She never listens' - to be told, 'She can't hear'".

Unlike an illness which is temporary, a progres-

sive disorder is a permanent state of affairs. The pressure to deny any difficulty or handicap is considerable, as to describe oneself as impaired implies being abnormal. Consequently, it was only slowly that I became aware that I was not hearing very well, but I did notice changes in my behaviour and that of others towards me.

I chose seats at the front of the room opposite the chairman of the meeting, or at the end of the dining table with my deaf ear to the wall. I began to prefer to be the passenger in a car because as the driver I couldn't hear the passenger.

People also began to behave differently towards me. They often asked me to repeat what I had said because I was speaking too quietly (this is typical of a conductive hearing loss because my voice sounds quite loud to me). There were experiences of being excluded, treated as stupid or patronized which were as unexpected as they were unwarranted; excluded because idle banter is difficult for me now, as I miss the point of most jokes, the casual aside, the quick repartee or the final line in the story delivered in a throwaway style; stupid because I don't hear an essential word or part of a word, often "not" and so don't understand; and patronized because when asking for repetition of a simple idea I am shouted at or told it doesn't matter.

Not only don't I hear, but I often mishear what has been said. I recently offered a colleague a coffee when she asked for a copy, and one of my children toothpaste before going on holiday when he had asked for a suitcase. Sometimes I realize my hearing is playing tricks but not always. I don't suppose the news commentator really said "President Reagan was given a vacuous welcome", more likely a rapturous welcome.

These days in my spoken interview I can only be sure of what is being said if I am saying it. Consequently, I tend to dominate conversations and in the teaching situation although philosophically and temperamentally inclined towards

workshops, discussions and the more interactive format, I am really only sure of what is being said if I lecture. The sort of "teacher talk" not recommended nowadays.

A hearing disorder is invisible, my hearing aid is intentionally discreet so people forget I don't hear too well.

My children say in no uncertain terms, "She can hear if she wants to." There is some truth in this. Listening is an active process and requires considerable effort for me. If the speaker is someone I like, talking about something interesting in a lively way I can put in the necessary effort to hear. But speech which is delivered rapidly in a slow monotone or a low voice requires so much effort that my mind wanders and I stop listening.

Unfortunately, while I may not be able to hear all the speech I may want to I can hear sounds I would rather not. Fan heaters in rooms predominate over speech frequencies, as do fans in overhead projectors or in cars.

In some working situations I often think I can hear almost anything more easily than speech. Squeaky chairs and rumbling water systems, coughs, sneezes and even yawns are all more audible to me than the human voice.

If two people talk at once I have difficulty eliminating one voice from my perception. So badly-chaired case conferences in ancient buildings with high ceilings and obsolete heating systems are not merely uncomfortable but almost impossible for me.

If rooms overheat and fill with smoke opening the window is no solution because although the temperature goes down and the smoke disappears, all too frequently the traffic noise comes in drowning the speech.

The physical conditions can make an enormous difference to hearing. Carpets and curtains absorb many extraneous sounds as do low ceilings.

A situation I now find almost impossible is the so-called "working lunch" in the dining rooms of large comprehensive schools. The theory is that we chat informally while we eat, but the noise of crockery and cutlery and several hundred pupils walking on uncarpeted floors produces a noise with which few human voices can compete for my attention.

I used to wonder why someone didn't deal with the noise makers until I realized that there weren't any, just a huge echo chamber called a dining room.

I have found, however, that there are many

things that can be done if a speaker really wants me to hear. Societies for the hard of hearing generally suggest:

- ☐ addressing the listener by name to gain their attention;
- ☐ speaking clearly and patiently;
- ☐ looking directly at the listener to allow the non-verbal, as well as the verbal, content of the communication to take place;
- ☐ putting the face in a good light and not covering the mouth with a hand or beard;
- ☐ not shouting or muttering; and
- ☐ getting to the point quickly.

I have observed that my own children use all of these methods very effectively, and without any recourse to direct instruction when they really want me to hear what they are saying: when they want to borrow the car, or ask for money or other favours. Colleagues too remember my difficulty more easily on occasions which are to their advantage.

Many of these suggestions which would enhance the quality of life for those who have difficulties would enhance the quality of life for everyone. Curtains and carpets to absorb extraneous sounds is a general comfort, as is ensuring that rooms are not so overheated or filled with smoke that windows have to be opened or an extractor fan turned on.

In meetings, adequate chairing which ensures that only one person is speaking at a time and that all can see and hear each other is a generally efficient procedure. Remembering that one person may not hear very well might even encourage the numerous people who mutter into handkerchiefs or speak with their hands over their mouths.

The problem with adult disorders is that they creep on slowly, whereas in childhood they tend to be either congenital or traumatic. Furthermore, not hearing very well actually has advantages which are unrecognized because they are unknown. It is a long time since I have been inconvenienced by the hum of a fluorescent light tube and I don't have to stop what I'm doing to answer the doorbell if I don't hear it.

On balance, however, I feel that any advantages are far outweighed by disadvantages and that declaring the problem is the first step towards getting practical help. It also helps to develop a supportive network as fellow sufferers come out of their closets.

Kathleen Cox is a senior educational psychologist in Sheffield.

Learning from afar

The Open University is proving to be a thriving export industry

In Indonesia - where the postman seldom calls - an open university student enrolls at his local post office in a remote jungle village. He also collects his learning materials scattered throughout Jordan and the Arab world in refugee camps, towns and villages. According to Dr Walid Kamhawi - president of Jordan's al-Qud project - a new open university in Amman will use Arabsat TV satellite to enable:

"The largest number of Palestinian, Jordanian and Arab young men and women to obtain higher education and training. Some 60,000 are expected to enrol initially and 40,000 of these will be Palestinians and Jordanians - the rest from other Arab countries." In Athens, British OU programmes are translated into Arabic for distribution throughout the Muslim world.

Britain's OU started its overseas consultancy service in 1973 with a project for the Free University of Iran. At that time, the ill-fated Shah was concerned with health-training for the masses. Last year, the Iranians came back to the OU with an enquiry about distance-learning programmes for the rural areas.

In the late 1970s, the People's Open University in Jakarta contracted Walton Hall to help develop its first programmes for primary-teacher training, followed by open-tech programmes for training in food processing and electrical wiring. But they take the British pattern and adapt or compromise it to suit their own priorities, very far from vocational and basic education in some parts of the Third World to higher education and management skills elsewhere. Dismantled ranges of courses in health-training, animal husbandry and agriculture to household and industrial

skills, literacy science and technology.

Earlier this year a delegation of Palestinian educators visited Milton Keynes to discuss how to provide televised distance-learning to Palestinians scattered throughout Jordan and the Arab world in refugee camps, towns and villages.

According to Dr Walid Kamhawi - president of Jordan's al-Qud project - a new open university in Amman will use Arabsat TV satellite to enable:

"The largest number of Palestinian, Jordanian and Arab young men and women to obtain higher education and training. Some 60,000 are expected to enrol initially and 40,000 of these will be Palestinians and Jordanians - the rest from other Arab countries." In Athens, British OU programmes are translated into Arabic for distribution throughout the Muslim world.

Britain's OU started its overseas consultancy service in 1973 with a project for the Free University of Iran. At that time, the ill-fated Shah was concerned with health-training for the masses. Last year, the Iranians came back to the OU with an enquiry about distance-learning programmes for the rural areas.

In the late 1970s, the People's Open University in Jakarta contracted Walton Hall to help develop its first programmes for primary-teacher training, followed by open-tech programmes for training in food processing and electrical wiring. But they take the British pattern and adapt or compromise it to suit their own priorities, very far from vocational and basic education in some parts of the Third World to higher education and management skills elsewhere. Dismantled ranges of courses in health-training, animal husbandry and agriculture to household and industrial

In spite of such apparent even-handedness, political questions seem bound to arise from Britain's involvement in various OU projects. Dr Kamhawi of the Palestinian OU says it will "contribute to the welfare and development of Arab communities under occupation". In the process, terrorists and their supporters are likely to be among those who benefit and Dr Kamhawi has been refused a visa to visit Britain because of his alleged connections with the PLO.

China has good access to television for open university training, enrolling an impressive 40,000 students a year, at a similar rate to that of Britain. School teacher training soon became an urgent priority for China's OU, as it did in Britain where degree-less teachers proved to be the biggest customers for OU degrees.

China has had one million students since it re-started its OUs in 1978, having lost a decade to the Cultural Revolution in the 1960s. And with radio and television universities in every province, and a recent \$100 million (£66 million) loan from the World Bank for distance learning, China is now endeavouring to make up for lost time.

TV-screens are used like blackboards in fields or on factory floors where commune training-officers have supervised groups of students taking notes.

In Japan and Korea purpose-built OU study centres, bristling with the latest technology, come under the authority of the broadcasting bodies while, in Thailand - where there are OU training programmes for the police and government administrators - the King awards OU degrees to successful students.

In Indonesia, the new Open University in Jakarta is an extension of the university system. As in Saudi Arabia and Australia - the OU is a third-choice: listing, on university, application forms.

India set up its first open university project three years ago in New Delhi. British OU staff

first visited India in 1971. An act of parliament last year integrated all states within a single OU system. Rajiv Gandhi's declared support for the fledgling National Open University set the tone for a new and serious attempt to update India's managers as quickly as possible.

In the Arabian Gulf States - where the King Abdul Aziz University dabbled with an OU system as early as 1976, as a mere extension of the university rather than a full-fledged independent OU system - the Gulf Co-operation Council has expressed interest in an open university. With plans afoot for a new Gulf University, a commonly agreed joint-syllabus and examining system, an open university in the Gulf could follow.

The Southern African Development International Conference invited Britain's OU to tender for a nine-country (Angola, Botswana, Lesotho, Mozambique, Malawi, Swaziland, Tanzania, Zambia and Zimbabwe) feasibility study for an OU system to take over where the primary and secondary school system finishes.

Wherever one looks in the Third World today, OU systems of one kind or another are either a reality or in the pipeline. According to Professor Ralph Smith, director of international affairs at Milton Keynes, the results can be assessed according to "how well Third World governments are getting more trained manpower and more efficient government services with which to solve their problems, how well they are getting more qualified teachers into their societies, more farmers with a knowledge of fertilizers and pesticides, more English speaking and other skilled workers and more women into the skilled workforce. Pakistan has succeeded in training 100,000 primary school teachers and 40,000 qualified students by the OU method.

"By upgrading its workforce the Third World is not only solving manpower problems at home but adding to its income by exporting trained people abroad."

Bob Crew

4 Titles available for recording from Sunday 23 October 1986

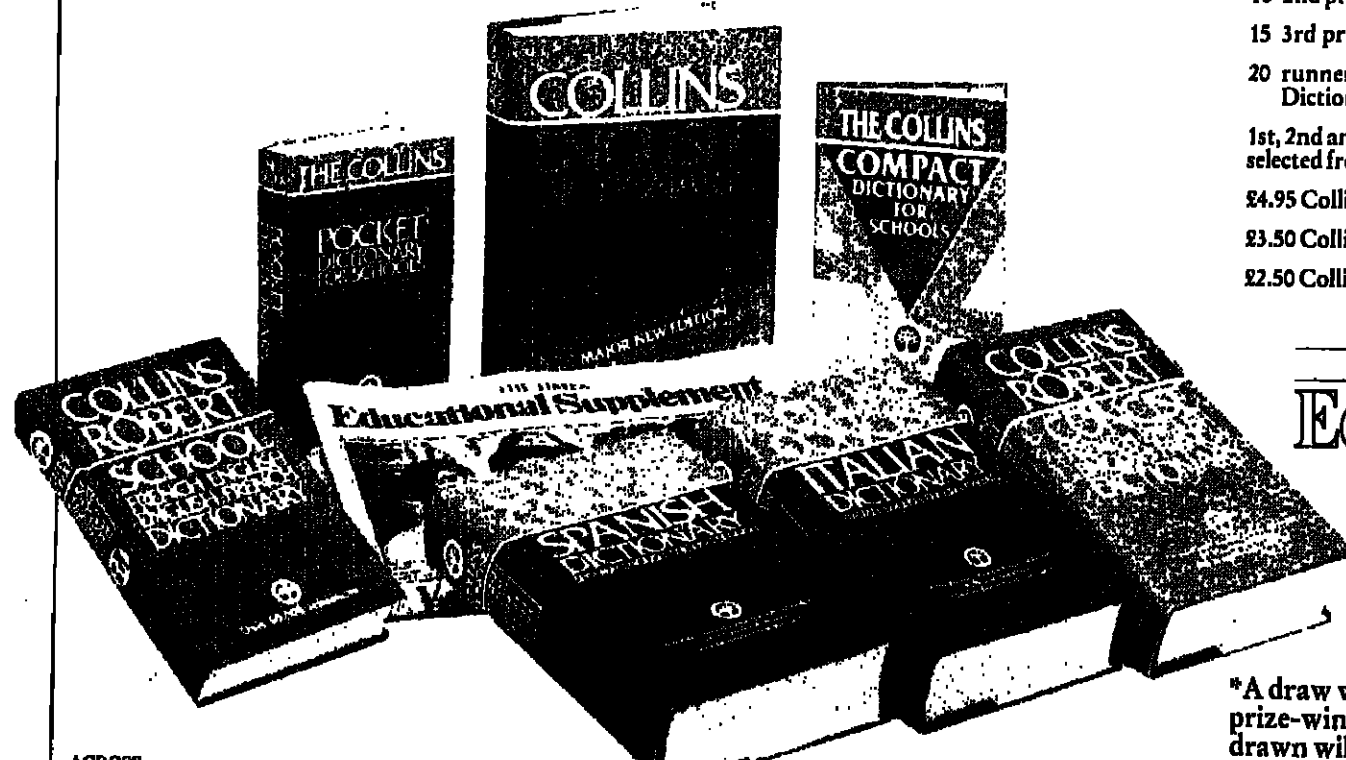
Approximate transmission times

Sunday 23 October 12.15 <i>Science (New Open)</i> P1 Code C 1.15 <i>The Northern Programme</i> P1 Code C Monday 24 October 8.45 <i>Can't Do That - Report</i> P1 Code C Tuesday 25 October 1.15 <i>10 Minutes</i> P1 Code C Wednesday 26 October 12.15 <i>Science (New Open)</i> P1 Code C 1.15 <i>The Northern Programme</i> P1 Code C Thursday 27 October 8.45 <i>Can't Do That - Report</i> P1 Code C Friday 28 October 1.15 <i>10 Minutes</i> P1 Code C	Sunday 23 October 12.15 <i>Science (New Open)</i> P1 Code C 1.15 <i>The Northern Programme</i> P1 Code C Monday 24 October 8.45 <i>Can't Do That - Report</i> P1 Code C Tuesday 25 October 1.15 <i>10 Minutes</i> P1 Code C Wednesday 26 October 12.15 <i>Science (New Open)</i> P1 Code C 1.15 <i>The Northern Programme</i> P1 Code C Thursday 27 October 8.45 <i>Can't Do That - Report</i> P1 Code C Friday 28 October 1.15 <i>10 Minutes</i> P1 Code C
---	---

GUILD LICENSING
8 Royce Road, Welwyn Garden City, Herts SG1 1YS
(0739) 315315
Late Changes (0739) 312152

OVER £3,000
WORTH OF PRIZES

The Times Educational Supplement and Collins Dictionaries invite entries from School Staffrooms. There are over 50 prizes to be won. The competition is also open to other readers of the TES. Contestants who are not members of a school staff should nominate a school of their choice to be the recipient of any prize. The winning entries will be the first correct solutions opened from those submitted or the next most nearly correct. All entries should be accompanied by the official entry form to be found in the September 26 issue of the TES or on the Collins Dictionaries leaflet mailed to secondary schools (ie no photocopies). The solution to the puzzle and the names of the winning schools will be announced in the TES on November 14. No employees, or their relatives, of the Times Supplement or the Collins Group are eligible to enter. Send your entry to Collins Publishers (TES/Collins Competition) PO Box, Glasgow G4 0NB, postmarked not later than Friday October 24.



SCHOOL STAFFROOM CROSSWORD COMPETITION

Prizes will be awarded as follows:

- 6 1st prizes of books to the value of £150
- 10 2nd prizes of books to the value of £100
- 15 3rd prizes of books to the value of £75

20 runner up prizes of one copy of the New Edition of Collins English Dictionary (£14.50)

1st, 2nd and 3rd prizes may be taken as books for the school library selected from the Collins Catalogue or as class sets of the following:

£4.95 Collins-Robert School French Dictionary (25 copies rate at £100)

£3.50 Collins Pocket English Dictionary for Schools (20 copies rate at £60)

£2.50 Collins Compact English Dictionary for Schools (20 copies rate at £40)

THE TIMES
Educational Supplement

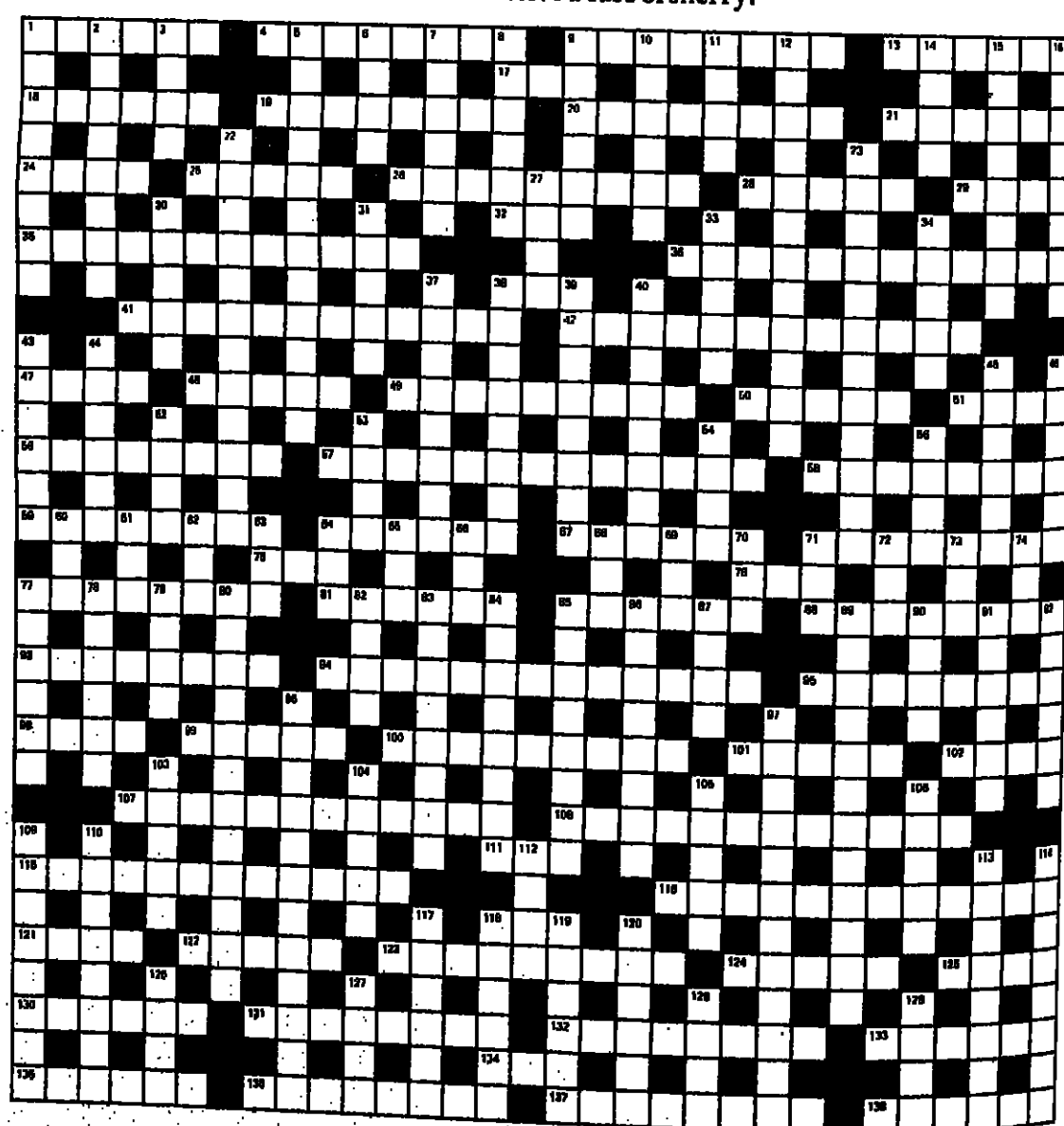
COLLINS
DICTIONARIES

*A draw will be made from the names of all the prize-winning schools and the staffroom of the school drawn will receive a case of sherry.

ACROSS
1 Frenchman in our power (6)
2 Blackdog Shakespeare put to the sword
9 Fought against being declared redundant (8)
13 Some loose change for a literary phrase (4)
14 Mayday many decades ago viewed in retrospect (3)
18 School keeps us in station (6)
19 They should be able to identify any salts in a mixture (8)
20 Stay well away from work (8)
21 Odd pieces of money (6)
24 Call for a shower (4)
25 Poet who makes a big hit in American sport (5)
26 Ill-judgment (9)
28 Tighten springs - they're a means of propulsion (5)
29 What a teacher may call for a continental breakfast? (4)
32 Unmarried sister (3)
33 He upsets some scholar about the beginning of term (12)
36 Not a short class in arithmetic (4,8)
38 Refuse to observe a request for silence (3)
41 What they do, and what they don't practice, point to their character (12)
42 Performed with a high degree of skill (12)
47 Port area (4)
48 The ghost of Shakespeare, some say (5)
49 Always be brave and don't worry (5,4)
50 Legal way to prevent a gathering of poets (5)

134 A river - doesn't sound like the Deel (3)
135 It may be recommended as a sun resort (6)
136 One engaged in a Red Cross operation? (6)
137 They may carry out services on a summer afternoon (3-5)
138 Made to smile by a thought? (6)

DOWN
1 It's very hard yet maths revision is essential (8)
2 Eat chips in a way that's not original (8)
3 Eat out in a way that's not original (8)
4 Talking voices ran on, wildly (12)
5 Inventor of the telephone - or part of it (4)
6 A little somehow to get safely down to rock-bottom (6)
7 Plan to uplift American soldiers in retreat (6)
9 A sleeping partner who was robbed of his capital assets (6)
10 Free beer held up, but put down again (6)
11 Back one's fancy in a leisurely craft? (4)
12 The aim of equal education? (7,5)
14 Jet fighters? (4)
15 State carriage? (8)
16 Rise clumsily to get Heather some wine (6)
22 Noble agent employed by mathematicians (6,6)
23 An incoming charge (9,3)
27 Crackers - or what they're required for? (5)
30 They appeal to lively children or rising politicians (5)
31 Eight Kings of England were entitled to be called it (15)
33 Some thousand held captive in battle (5)
34 Dis duck - or dat? (5)
37 Influenced in an unnatural way (8)
38 Grey is to study Maugham's work (8)
39 School-break period? (4,4)
40 Figures incorrect, so can't go (8)
43 Pat's bill for wine (6)
44 A rigid habit of the medieval ages (6)
45 Full of zeal for a new trend (6)
46 A spot of trouble over a pupil? (4)
47 Short story writer to attempt verse (6)
52 Pack animal turns to run (4)
53 Listen and learn (4)
54 A spot of trouble over a pupil? (4)
55 Victoria thumbed by Jack for a lift? (4)
61 Part of a week-end supplement (3)
62 Blade used on a cutter perhaps (3)
63 One point to the Italian, nothing to us (3)
64 Currency check? (3)
65 Wage rise? Just talk (3)
66 Look at the middle of a cyclone (3)
68 Inspired piece of music (3)
69 Leaves note attached to article (3)
70 Regret expressed in the French way (3)
71 Link named to solid jelly (3)
72 Have to concede (4)
73 Female sheep quarters (3)
74 It had a flight of fancy (3)
75 It describes a foot in metres (6)
76 Story book is a gift (6)
78 Courage needed on toy-roads (4)
80 Initial repetition is only repetition after all (12)
82 It can't be passed in science (4)
83 Pause for recreation (8)
84 Lament to become easy-going (8)
86 See 77 across
87 It suffers periodic reversals in the kitchen (3-5)
89 Means of transport, sometimes sprung (8)
90 There's an element of heat in it (8,4)
91 University stream (4)
92 Close - doubly close in fact (6)
93 Synonyms, according to an enemy's (4)
96 Catch lightning? (4,8)
97 Spare locker? (3,3)
103 Try by a quarter to eight (3)



OFFICIAL ENTRY FORM

School

Address

Postcode

Name of Contact at School/school sponsor

Address

Postcode

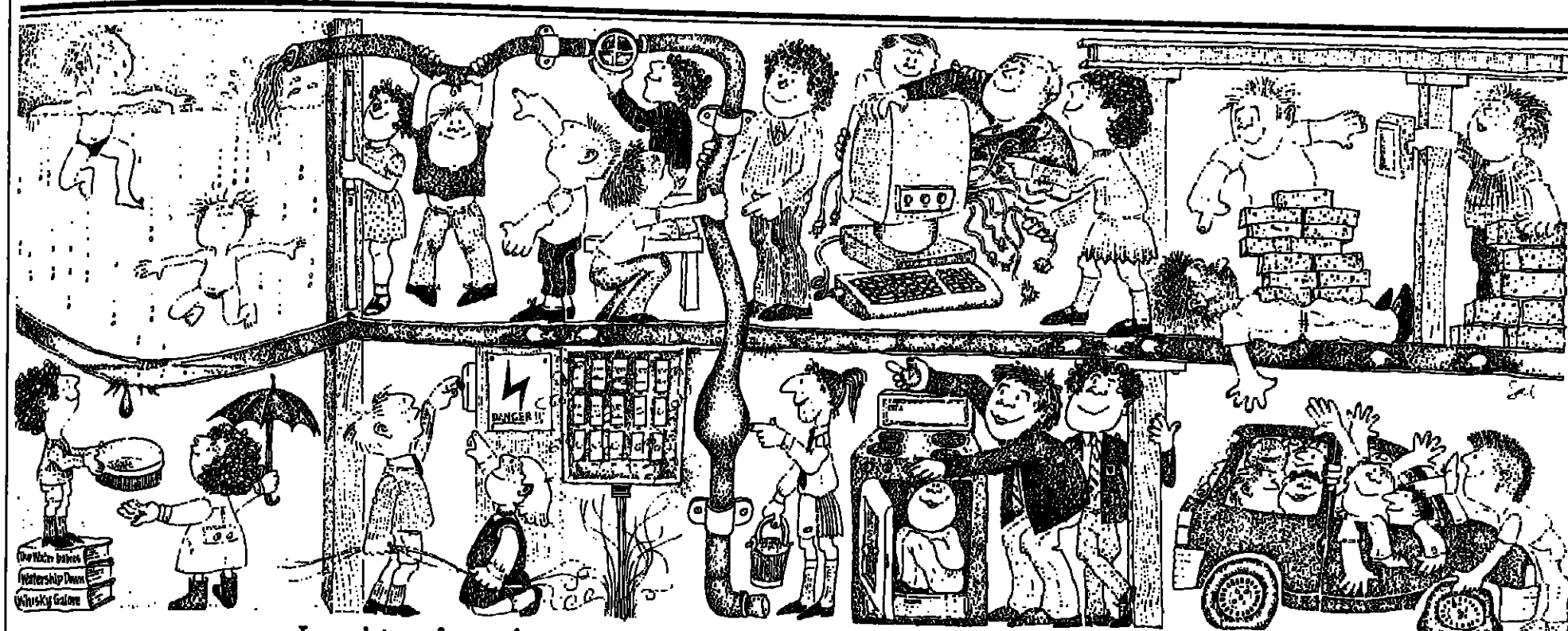
Name of Contact at School/school sponsor

Address

Postcode

EXTRA MATHEMATICS

IMS weekend 40 "Investigations in YOUR classroom" 42 Middle school: evaluating learning 50. Primary: playing Passola 48 Achievement for low attainers 44. Japan: ahead of the rest 45. Teacher training for GCSE 41 IMPACT project: progress report 47. Investigations as coursework 53.



Looking for relevance

Can we let them decide?

BARBARA EDMONDS
DEREK BALL

It is fashionable at present to suggest that the school curriculum should be relevant. The HMI document, *The Curriculum from 5 to 16*, suggests that "all that pupils learn should be practical, and therefore relevant, in ways which enable them to build on it or use it for their own purposes in everyday life".

Mathematics, more than almost any other subject on the school curriculum, has long been perceived as useful (and relevant?) by pupils themselves, their parents, their teachers, industrialists and Government. Unfortunately the way in which these groups define relevance may vary widely.

Pupils not infrequently ask teachers what is the use (or relevance) of what they are currently struggling to learn. We believe that pupils ask this question when they are finding the work they are doing boring or difficult. For pupils, work is relevant if it is enjoyable.

Most teachers, too, want their pupils to enjoy their learning. More important, however, teachers want to enjoy their own teaching. Because teachers are, on the whole, expected to have quiet, orderly classrooms they will be most likely to regard mathematics as relevant if it leads to good behaviour.

Parents are likely to want children to do well in life. Some parents, who as children may have been afraid of school or bored by it, may only see education as relevant if their children are finding education unthreatening. Other parents equate education with the passing of examinations. To them mathematics will be relevant if it helps their children gain a qualification which, in turn, will enable them to obtain a good job. The content of the mathematics qualification to them is immaterial. It is hardly surprising that many children eventually acquire a similar attitude towards the relevance of mathematics.

Politicians are likely to have different goals. They frequently have to deal with awkward and unpleasant problems which may or may not be of their own making. Frequently it is useful to have someone else to blame for such problems. If the problems involve young people it is convenient to blame school teachers. One way of doing this is to accuse teachers of failing to teach relevant skills and attitudes. Because mathematical skills are perceived as being easy to define and to recognize, and because such skills are perceived to be relevant, schools may be attacked if it is believed that they are not teaching such skills.

It is against this background that we turn to the mathematical curriculum and ask what mathematics is relevant.

Skills learned as part of the school arithmetic syllabus are perceived by almost everybody to be relevant mathematics. To what are such mathematical skills relevant? It is undoubtedly true that without a certain facility with money and with other arithmetical skills, people are handicapped in going about their daily business. It is also true that many of the commitments made about the usefulness of arithmetic do not address this central theme.

A teacher was doing some mental arithmetic, including estimation, with a group of 15-year-olds. One girl objected that practising getting the "wrong answer" to the questions posed was rather silly. When it was suggested that estimation might be a useful skill when shopping in the supermarket, she replied "Yes, but we are not in the supermarket now". She was suggesting that "relevant" skills are best learned in the context in which they are relevant, and that teachers can never be certain that their pupils are acquiring the ability to cope in any particular context unless they see them operating in that context.

Arithmetical skills are often considered to be "basic skills", and the implication is drawn that such skills are relevant to everyday life. Pupils in most schools spend a considerable amount of time practising the manipulation of fractions perhaps because of the mistaken belief that such skills are useful. It seems clear to us, however, that such skills are not useful in adult life. Indeed it is a very good thing that this is so, because research shows that very few pupils leave school with any competence at these skills. We consider it strange that adults (teachers, parents, publishers of textbooks and examiners) behave as if they believe both that manipulating fractions is a useful skill and that most children can acquire this skill.

Calculators, on the other hand, are still not entirely approved of by some parents and teachers, even though our experience would suggest that an ability to use a calculator is a far more relevant skill for everyday life than almost any of the pencil-and-paper arithmetic taught in schools.

Geometry is a part of the mathematics syllabus which has been in decline in recent years. This is partly because teachers have acknowledged that O level Euclidean geometry is too difficult for the vast majority of pupils

The teaching of geometry has also declined because it has become increasingly fashionable to focus on "achievable objectives": children work steadily through textbooks and workbooks.

Geometry is not a subject which lends itself to such treatment. The facts and skills in geometry, such as calculating the third angle of a triangle, are relatively trivial and appear to have little practical relevance. But geometry is about spatial relationships, and an appreciation of space and form is of considerable practical value. This cannot be taught by means of a sequence of graded exercises.

It is significant that some parts of the mathematics curriculum (notably

arithmetic and algebra) are seen by many people both inside and outside education to be relevant, whereas other parts (topology and, perhaps, geometry) are not. When there is general agreement that a subject is relevant it appears that no justification is required to maintain its position in the school curriculum. Arguments that some of the skills practised by pupils are obsolete fall on deaf ears, or are only heeded very slowly. There is still widespread popular belief in the efficacy of practising such "relevant" skills, even though research clearly indicates that such practice is largely futile: if pupils are unable to master a skill fairly quickly they do not appear to improve subsequently. Perhaps some teachers and others believe that, nevertheless, such practice is good for our souls.

During the next few years children are likely to be engaging in more sustained projects as part of their learning of mathematics. In several primary schools children are working together on "turtle geometry" projects in which they set their own goals and

spend several days or weeks achieving them. GCSE mathematics includes a coursework element which will become compulsory in 1991. This development has its opponents, but it does provide a way in which mathematics can become more meaningful to some of the children studying it. It would be sad if teachers and others were seduced into believing that the most useful projects are those which involve "real life" problems. One reason why this will not always be the case is that "real-life" problems are frequently adapted to make them more "mathematically respectable" when they are studied in schools.

The value of projects lies less in the subject matter than in the fact that topics are chosen and worked on by the pupils themselves. The "relevant" skills learned concern the ability to plan projects, to apply mathematics as and when appropriate, to sustain work on them until some conclusion is reached and to communicate what has been learned to other people.

continued



Cambridge
Mathematics

Lost for new things to do with your class, or new ways of doing them?

Fast upon the enthusiastic reception for Brian Bolt's resource books for teachers, *Mathematical Activities* and *More Mathematical Activities* we are pleased to announce a third book in the series: *Even More Mathematical Activities* by Brian Bolt. About £6.95.

- contains another 133 investigations, puzzles, projects and games
- plus a commentary which provides solutions and even more ideas.

For FREEPOST inspection copies fill in the form below -

Please send me inspection copies of (TICK BOXES)

0521 28518 6 ☐ Mathematical Activities

0521 31951 X ☐ More Mathematical Activities

0521 33994 4 ☐ Even More Mathematical Activities

NAME

SCHOOL

ADDRESS

POSTCODE

Send to: Elizabeth Wilson.

CAMBRIDGE UNIVERSITY PRESS

The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, England

EXTRA

The Integrated Mathematics Scheme Interaction weekend

PHIL COTTIER



Bob Verles (centre) from Hillingdon Curriculum Support team leading "body maths"

although some discussion of the IMS scheme. Around midnight delegates drifted off to bed.

The following day began with a plenary session. After the hectic activities of the night before many were grateful to sit back and listen to the publishers. Chris Kingston, Director of the Education Division of Bell & Hyman, the publishers of the course, began by describing the Bell & Hyman story (remember Parr and Durrell?).

And how IMS had developed. Peter Kaner continued this theme, concentrating on the role of published material in the teaching of mathematics. "To me, the job books and material is to resource and support teachers - to give them the opportunity to develop their knowledge, their own relationship with children. This is what I have tried to do with IMS."

Identifying the publisher's role Chris Blair, the Commissioning Editor in charge of IMS, chose listening as the key. "I think listening is the important word. We have listened to what teachers are saying and writing, listened to the direction in which much education seems to be going, listened to Peter Kaner's version of what mathematical education is all about. IMS is the result of this process."

Bell & Hyman promised to go on listening. They plan to make full use of the experience of user schools to develop IMS in the future through regular consultation and user groups. From the delegates' point of view it was most encouraging to hear a publisher making such a serious commitment to consulting those of us at the chalk face.

There is a limit to how much even IMS users want to hear about IMS and after coffee Angela Walsh, Deputy Director of the Cambridge Primary Maths Project, talked to us about her work. Outlining the project Angela focused on the impact of new technology in primary schools on mathematics. Interesting statistics were provided on the extent to which very young children had access to the calculator. From a very wide brief two points were worth noting for the secondary school teacher. Parents should be educated in the kind of mathematics their children are learning, and, the teaching of number in junior schools needs a total rethink. In the future "children will be encouraged to develop their own understanding of number much more than in the past and where necessary they will use a calculator."

In the afternoon, we had to do some work. Working groups looked at IMS

in four areas: low attainers, mixed ability, organizing IMS, and IMS and other resources. The interaction between members of the groups made the whole weekend worthwhile for many delegates. To find so much common ground, and, where there was, fresh ideas - was most gratifying.

Delegates got to grips with such issues as: developing a syllabus to support IMS, supplementary material, secondary - primary liaison and assessment. In the low attainers' session members decided to develop an informal user group to provide ideas for the authors of the teacher's books, not practising IMS teachers in Hereford and Worcester.

After a superb evening meal delegates (if they still had the energy) chose between a session on Logo or a "Maths Games Workshop" led by Bob Verres from Hillingdon Curriculum Support Team. Many new ideas came out of the latter workshop (which included 15 minutes' "body-maths" on the lawn), and those attending were most appreciative.

So to the final morning - three "Investigations" sessions. Delegates chose from "Beginning investigations", "Investigations within the context of IMS" and "Assessing investigations".

The groups looked at starting points for investigations, argued about what was meant by investigative teaching and discussed how to assess them. Inevitably the sessions raised more questions than they answered. However, all participants said they had learned something.

Talking over lunch to colleagues, who had now become friends, it was clear that we were all concerned about investigations. The opportunity to discuss this challenge had been most welcome.

Conversation had certainly flowed at Nottingham and for many of us the biggest "plus" from the weekend was the promise by Bell & Hyman to support regional IMS "user groups" where we could continue talking.

The first item on the agenda had to be investigations.

Phil Cottier is head of mathematics at Leo Manor High School and Community College, Luton.

camp. Their book deserves a wider readership than it will probably get, and could serve as a useful source of ideas and discussion for a variety of teacher education contexts, as the authors envisage (despite the irritating absence of an index). There is much useful material here. However, those of us in the second camp will find the authoritarian and prescriptive style of the text (and its unquestioning perpetuation of a dubious notion of "ability") as objectionable as the authoritarian mathematics curriculum of which we are so critical.

Neil Bibby

Real life

Enterprising Mathematics. By the Spode Group. Oxford University Press. £12.50. 019 85336526.

This is yet another excellent publication from the Spode Group. The aim is to present mathematical problems in everyday terms, in this case for less able students in the 16-plus range. As with previous Spode publications it is a resource book for teachers who are encouraged to duplicate sections for class use. The stated philosophy of the text is to stimulate discussion and debate and to show those who have been turned off mathematics by the past that the subject does not need to be tedious but can be interesting, entertaining and enjoyable. The first part of the text presents problems grouped together under various headings eg sport, money, travel, etc. The second part gives some answers to the problems set in part one.

I would recommend this text as a source of relevant real life problems which can be used to enhance mathematical learning.

Peter Connah

Can we let them decide?

continued

The National Criteria for GCSE mathematics make it clear that the curriculum must be differentiated. In other words, different pupils will follow different curricula so that what they learn is "appropriate to their individual levels of ability". On the face of it this seems to be a good idea; one frequently voiced criticism of comprehensive education is that all pupils have been forced to follow a grammar-school curriculum. On the other hand, who is going to decide what is appropriate for a particular pupil?

As we have already indicated, there is lack of agreement about what is relevant or appropriate because different groups of people use different sets of criteria. It is not easy to achieve the recommendation of the HMI document *The Curriculum from 5 to 16* that pupils should be able to use what they learn for their own purposes, because each of us has different purposes in life, and what is relevant to one pupil will not be relevant to another. The only way to make mathematics relevant to pupils who study it is to involve them in deciding what they want to learn and how they want to learn it. To accomplish this, children must be treated more like adults. This may seem a revolutionary step, but it is surely the most significant step we can take to ensure that, in the words of *The Curriculum from 5 to 16*, education "is seen by pupils to meet their present and prospective needs".

Barbara Edmonds is head of Mathematics at Longside College, Bristol. Derek Ball lectures at the University of Lancaster School of Education. One of the editors of *Micromath* and the author of *Microcomputers in Maths Teaching* (Hutchinson).

Familiar pattern

A Complete GCSE mathematics general course. By A. Greer. Stanley Thornes £5.95. 0 85950 5634.

This 413-page text is one of a series of three books intended to cover all the topics prescribed by the National Criteria for 16-plus mathematics. According to the author, this general course is written for those students who would expect to obtain a grade C or D in GCSE.

Designed to be a revision book, it has separate sections on arithmetic, algebra, geometry, graphical work and statistics. The contents and approaches used throughout are very traditional, following the tried and tested pattern of presenting the necessary theory with examples which show how the theory is applied in practice, followed by exercises which, according to the author, supplement and amplify the text. J. Greer also states that many examples of mathematics in the real world have been used. This does not mean that the text advocates a practical approach, merely that "problems" is sums in words of the type used in texts of the Sixties involving reference to the real world. Indeed, many of the actual examples and exercises can be found in texts already published by the same author for CSE and GCE.

At the end of most chapters there is an exercise which is divided into two parts, section A and section B. According to the author this is because all the examining boards have devised overlapping examination papers. It also provides the author with the opportunity of duplicating whole (or rather half) exercises in the other two texts which complete this series in that section B questions in the Basic book appear as section A questions in the General book, while section B questions in the General book appear as section A questions in the Higher book. Mental tests are also offered at the end of many chapters.

The text follows the now familiar Greer double-column page. The presentation is clear though devoid of any colour or illustration. I have no doubt that the book will sell well, though I would urge all heads of departments to scrutinize the contents closely to satisfy themselves that what they are buying is in fact "new".

Peter Connah

What a journey! On the last weekend of term - feeling the way one does at this stage in the year - I found myself sitting in a heavy traffic jam on the M1 on the way to a working weekend about the Integrated Mathematics Scheme.

IMS (Integrated Mathematics Scheme) is the scheme of textbooks (by Peter Kaner, published by Bell & Hyman) that we use at our school. Three months ago an invitation had arrived on my desk inviting me to the "IMS National Conference" at Nottingham.

It promised to create the opportunity for 100 users from all over the country to meet each other and offered a programme "pertinent to IMS as well as the more general concerns of mathematical education", and since Lea Manor is committed to the scheme, using it throughout the first, second and third year, I felt that I must find out what this conference was all about.

Having found the hall of residence and picked up the obligatory folder, the first Mathematical task was to find my room. "Just follow the same colour carpet", said the porter - easy. Next, find the bath - more difficult. It turned out to be in what I assumed was the warriote. Most difficult task was to get into the bath. Are all Nottingham University students midgets?

Returning to reception, I gratefully downed a cup of tea, found out what I was doing for the weekend and met up with "old" acquaintances. We tried to sneak a look at the Investigations that Peter Kaner, the principal author of IMS, had organized as that evening's activities. First Mistake - Peter caught us in the act. We retired hurt to the bar!

After dinner self-selected groups of six or seven delegates attempted the five investigations. Each group had to complete an investigation in 15 minutes and then spend five minutes writing up the results. Time was indicated by the blowing of a whistle. The team that "did best" was to be awarded a bottle of champagne.

An hour and 40 minutes later, mentally exhausted and very thirsty, we finished. Back to the bar to mull over the evening's work. Consensus of opinion - a very good exercise and certainly an ice-breaker. Amazingly there was very little shop talk.

A prescriptive approach

Teaching Mathematics 11-16: A Difficulty-centred Approach. By D S Macnab and J A Connah. Basil Blackwell £5.95. 0 631 14148 0.

This book is a significant addition to a surprisingly sparse literature. The subtitle reflects the authors' preoccupation with the improvement of mathematics teaching by focusing attention on "the reasons why children fail to learn mathematics". It is addressed to heads of department, students on initial training courses and participants in in-service courses. The book is organized into 14 self-contained chapters which comprehensively cover the major concerns of mathematics education, from the most general of chapter one ("Aims in Secondary Education") through to the final two chapters which deal with the use of electronic calculators and microcomputers respectively. There are chapters focusing on pupil attitudes, themes from research, learning difficulties, mathematics across the curriculum and course design, among other topics. These can be read independently of each other, as the authors suggest.

The approach is unapologetically prescriptive: the authors clearly believe that the task of contributing to the improvement of mathematics education is about providing prescriptions for others to follow. The book, in effect, attempts to define, with varying degrees of explicitness, what is in the authors' view "good practice". As a teacher trainer myself, it is not at all clear to me that this is the appropriate way to induct teachers into their role. Initial training needs to be encouraged to find their own way between

the extremes of "role-taking" and "role-making", while in-service training is largely about encouraging teachers to have the confidence to explore their own views, and to learn from the consequences, rather than confining themselves to the enunciation of somebody else's idea of "good practice". This criticism would not be of such importance if we were given some idea of from what experiential basis the authors proffer their advice; however, it is a serious failing of the book that no biographical information on either author is provided. Despite this, many of the prescriptions are entirely unreasonably. Some are little more than common sense, a good deal more would not conflict with much of what I would regard as fairly enlightened opinion within mathematics education, and much else is clearly the consequence of extensive classroom experience of a fairly traditional sort, subsequently analysed and evaluated.

Those of us involved in teacher education and who satisfy the CATE criterion of "recent and relevant experience" inevitably try to draw both on this kind of experience (as "old hands") as well as (proper) research findings (where they exist). But the problem with this text is that the basis for many assertions is simply not made clear, so that when I read for instance, on page 121 that "the abstract notion of a group is beyond all but the most able" (the group concept was central to many "modern mathematics" schemes) I am unsure whether this is the judgement of "the old hand" (as evidenced by his frustration) or research. The authors also draw attention to the authors' perpetuation of the prevailing assumptions regard-

ing mathematical "ability": it is a significant weakness of the present text that it fails to scrutinize either the notion of "ability", or the philosophy of "mathematics-for-all".

It is almost certainly the hidden curriculum of mathematics education which has the most significant effect in putting pupils off the subject and which enables us to account for much of the disparity in attainment. While the "difficulties" some pupils experience with the subject might well be rooted in their exposure to a curriculum which encourages only an instrumental understanding of the subject, many others find their exposure to an authoritarianly presented corpus of knowledge such a demoralizing experience that they reject the subject outright. For instance, it is all very well to discuss, in the interests of amelioration, the possible states of mind of the learner who believes that $(a+b)^2 = a^2 + b^2$ (p 61) but for many pupils the problem is not how one writes $(a+b)^2$ without brackets, but why anybody should be interested in doing this in the first place.

The Norwegian mathematics educationist Mellin-Olsen has recently commented that two distinct groups can be discerned within the field. There are the "fine-tuners" (my terminology), who believe that with some adjustments and improvements mathematics education can be put on course. They are a sort of mathematical British Rail, whose motto could equally well be "We're getting there". And then there are those who take a more critical stance, and who seriously question both the quantity and quality of the mathematics curriculum experienced in our secondary schools. Macnab and Connah clearly belong to the first

EXTRA

GCSE: pinpointing some of the skills teachers are going to have to acquire and develop

When does the real training start?

IAN THOMPSON

The philosophy underlying the recently completed GCSE in-service training exercise appears to be based on the pious hope that the implementation of positive changes in the examination structure, modes of assessment and through of the famous "cascading" model of in-service training will automatically bring about the development of the necessary skills and expertise. This point is reiterated in the various documents issued by the SEC (Secondary Examinations Council). The booklet *GCSE: A General Introduction*, for example, makes the point that one of the objectives of the introduction of the new examination is "to promote improvements in the secondary school curriculum and the ways in which subjects are taught".

It is also stated that the new examination system has a major contribution to make towards the achievement of the Government's aim of "... bringing the level of attainment of at least 80 to 90 per cent of all pupils up to at least the level currently associated with the average, as reflected in CSE grade 4". What is more, this is to be achieved without standards becoming

less exacting, grade for grade, than those required in the existing O level and CSE examinations. Since no mention is made of other initiatives which are to assist in the achievement of this aim then it is obvious that quite a substantial improvement in the quality of classroom teaching is expected to accrue from the introduction of GCSE - particularly if an extra 40 per cent of students are to achieve "average" grades or above!

It is, of course, true that the examination system at 16-plus has always had a disproportionate and negative influence on the course content and teaching methods used in secondary classrooms, but it does seem to be rather naive of the Government to assume that the making of improvements in this system, however welcome they may be, will bring about corresponding improvements in classroom practice.

A brief consideration of two of the major themes that underpin the new examination - differentiation and coursework (leaving to one side the "grade criteria" minefield) - and the importance they are given in GCSE mathematics in particular should help to pinpoint some of the myriad skills that teachers are going to have to acquire and develop if they are to successfully implement the changes demanded of them.

It could be argued that differentiation has featured in mathematics classrooms for many years: the top two sets in the fourth year are usually prepared for O level and CSE examinations respectively, whereas the third set might follow a course leading either to a CSE arithmetic paper or a limited-grade Mode 3 CSE examination (or, unlikely - depending on which side of the desk you sit!) might take the local education authority numeracy test - if one exists.

However, "differentiation" in the new examination is about enabling candidates of differing abilities to demonstrate what they know, understand and are able to do: about ensuring that students are given tasks which are commensurate with their level of attainment; about students achieving success and feeling that the examination has been a worthwhile experience; about awarding marks for high marks and good performances.

In mathematics there have to be at least three levels of assessment with no papers common to all candidates and each level catering for a specific range of grades - up to a maximum of four. A candidate may be entered at one level only, and anyone failing to achieve the standard required for the lowest grade will be asked to re-enter at the next level. Disregarding the question of the extent of such a situation this puts the onus on the teacher to make a very early decision. The SEC working party "Differentiated Assessment" in

GCSE" makes the point that "The risk of candidates being ungraded sharpens the responsibility of teachers to enter them at an appropriate level". It most certainly does! But do teachers possess this level of skill, and if not, what help are they to be given to acquire it? All teachers must have had experiences of pupils entered for O level or CSE who were awarded grades substantially different from those which they were expected to achieve.

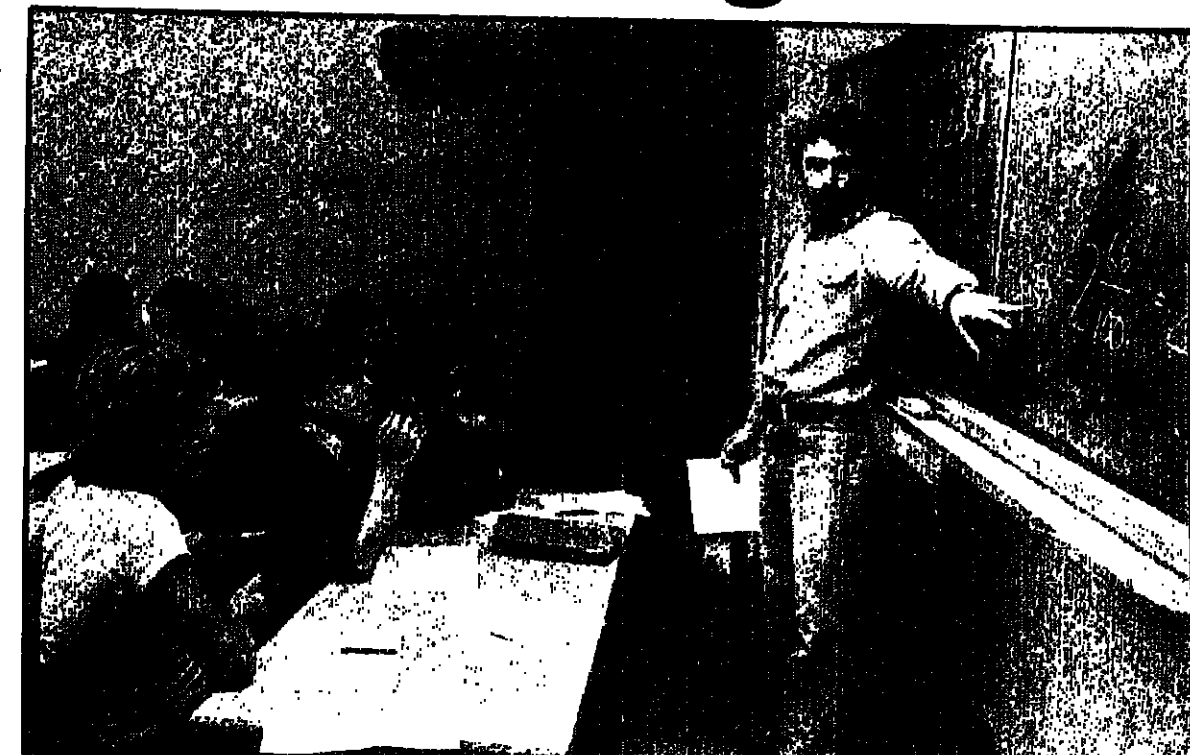
We are also informed that differentiated papers in mathematics are intended to "put teachers in a better position to match depth of treatment, and the range of topics covered, to students' particular needs". That teachers are going to have to do this more effectively is certainly the case, but *how* differentiated papers are going to help them is not spelled out. What does seem clear is that substantial in-service training geared specifically towards helping mathematics teachers respond to the demands of differentiation would appear to be necessary.

Another issue relating to differentiation is the parental pressure that teachers experience concerning exam entry. What plans does the Government have to inform parents, primary school teachers and employers of these important changes in the examination structure at 16-plus? And can we expect any such publicity to be better organized, more comprehensive and more effective than it was in educating the general public about CSE in the 1960s?

In mathematics there are certain types of work, such as that of an investigative or practical nature and that which requires the candidate to collect, select and organize data from the real world, which are best assessed by methods other than timed written papers. This has led to the SEC's inclusion of two additional assessment objectives for GCSE mathematics - optional from 1988 but compulsory from 1991 - which are to be realized by the assessment of coursework. The extra aspects of mathematical ability which are to be assessed comprise: oral response to questions; discussion of mathematical ideas; mental calculation; practical work; mathematical investigations and work of an extended nature. However, it surely goes without saying that if these aspects of mathematics teaching are to be assessed then it is imperative that work of this nature actually takes place in classrooms around the country. But does it?

A brief look at the various reports of HMI school inspections and at the many documents emanating from the DES in recent years would suggest that the activities typifying this broader approach to mathematics teaching are rarely seen in secondary classrooms. To select just one example: if teachers are to keep a running record of pupils' oral contribution in class as recommended in the "GCSE Mathematics Guide" then children will need to be provided with the opportunity of becoming involved in frequent mathematical dialogue with their teachers rather than be on the receiving end of the more usual monologue. Most of the research evidence concerning what actually goes on in mathematics classrooms suggests that the major form of oral response given by children is of the "guess what's in teacher's head" variety. Higher cognitive level questions or questions of a more open-ended nature do not occur with very great frequency, and teachers generally fail to allow children sufficient time and space to think about a question before they rephrase it, ask a different pupil or answer it themselves.

Other potential problems with the assessment of oral work in mathematics concern the shy or withdrawn child who lacks the confidence to proffer an answer; the child who is unwilling to contribute, and who often leaves the answering of questions to the more forward and confident boys. Research suggests that teachers often give more serious consideration to boys' ideas and tend to ask them the more difficult questions.



This obviously has implications for the awarding of marks for oral contributions to lessons. An alternative approach making use of the one-to-one interview, involving as it would, a goal 70 per cent of the examination year group would make excessive demands on teachers' time for what is, in effect, a small proportion of the marks.

The "National Criteria for Mathematics" differentiate between "oral response" and "discussion of mathematical ideas". If children are to be assessed on their ability to discuss mathematics with their peers, then the implications are that children need to have had plenty of experience of participating in group activities which provide a stimulus and an opportunity to share mathematical ideas and to discuss problem-solving approaches with other children. However, HMI have reported that in only about 1 per cent of the secondary classrooms they visited did they observe children doing mathematics in groups - a pre-re-

quisite, one would have thought, for any worthwhile interchange of mathematical ideas to take place.

Even when children seem to be working in groups, as is frequently the case in primary schools, the appearance often gives the lie to what is actually going on. Researchers have observed that this type of work more often than not involves children sitting in groups working on individually assigned tasks rather than working collaboratively on a common or shared task. Organizing the type of collaborative groupwork essential for the promotion of mathematical discussion and the development of oral communication skills is no easy task, and could not be said to constitute part of the average secondary school mathematics teacher's repertoire of teaching strategies or organizational skills.

A further assessment objective states that children must be assessed on their ability to carry out practical and investigational work. If children are to be examined on practical tasks it

is essential that they meet a variety of practical equipment throughout their school careers. Infant classrooms are usually full of apparatus available for use in mathematics, but as one moves through the age range the variety, availability and use of such equipment diminishes to the extent that secondary school mathematics equipment often comprises little more than pencils, rulers, compasses and protractors.

It is the case that this gradual decrease in the use of practical apparatus often goes hand in hand with an increase in the attitude that real mathematics is done in the head or on paper and that using practical equipment is a childish activity. This is unfortunate since at all levels of mathematics learning the use of apparatus can enhance the acquisition of concepts. It is quite easy for teachers to ensure that children come into contact with a wide variety of mathematical apparatus. What is much more difficult

continued

The Liveliest Introduction to Secondary School Maths

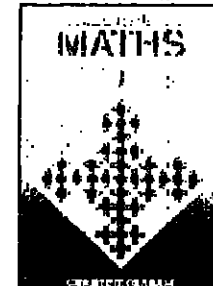
Steps in Maths Book 1, is part of a three-book course, written by Christine Graham, designed for the first three years of secondary school.

No other book at this level is packed with such a variety of engaging activities to exercise the whole range of mathematical skills:

★ Covers all the content of the Cockcroft Foundation List and objectives for the age group 11-14 stated in the DES policy document 'Mathematics 5-16'

★ Lively and appealing style full of activities and a reading age of 10.5 makes it ideal for the whole ability range

★ Extension sections at the end of each topic to stretch your more able pupils



★ Each topic presupposes as little knowledge as possible

★ Recap sections and multi-choice questions at the end of each section to reinforce topics already learnt

★ Check ups at end of the book enable teachers to assess pupils performance in the four basic arithmetic skills

ORDER FORM

Please send me an inspection copy of Steps in Maths Book 1 (Spring 1987), price £2.75 (prov), ISBN 0 85122 261 0.

Name _____ School _____
Address _____
Postcode _____
To: Adela Fuller, Hutchinson Education, FREEPOST, London WC2N 4BS

Changing teaching styles for GCSE

Your investigations

Ever since the publication of the Cuckcroft report, and the publicity and prominence given to paragraph 2.4.1, the number of mathematics teachers who incorporate problem solving and investigative work into their teaching has been steadily growing. So too has the number of teachers who feel they ought to be taking investigations into their classrooms but lack the confidence, knowledge or skills to make this dramatic change in their teaching style. And dramatic change it certainly is, for many whose style is based on exposition, consolidation and practice and who, judged by examination results, have been successful in their teaching. Suddenly the criteria for success in the 16-plus examinations have changed. By 1991, at the latest, mathematics teachers will be obliged to provide their pupils with opportunities for investigative and extended pieces of work and many teachers will need support and guidance in these areas of working.

Eighteen months ago a letter was sent to schools in Oxfordshire and Buckinghamshire inviting teachers who were either reluctant to try, or even hostile to the idea of investigations, to participate in an experimental DES regional course at the University of Oxford Department of Educational Studies. The intention was to exclude those who already worked investigatively with their pupils, and most especially those who enjoyed working in this way. For hesitant teachers it is often the very enthusiasm of their colleagues which emphasizes their own inadequacies. The isolated nature of teaching inhibits teachers from realizing that there is a multitude of other teachers "out there" behind closed classroom doors with the same insecurities and worries about changing established styles of teaching.

The personal cost of an attempt to approach pupil-learning in a novel way must not be underestimated. An act of faith is involved in the resolution "I'll stop telling them everything and let them discover mathematics for themselves" - faith in pupils' inquisitiveness, faith in one's own class management, faith in the gospel that mathematics can be learned in this way. The course did not seek to evangelize, but to offer a secure space in which uncertainties could be ex-

plored and the potential value of investigations to enhance learning could be exposed.

The structure of the course was built around four key elements:

- each participant's experience of doing an investigation,
- small group reflection on this experience,
- each participant's experience of taking the same investigation into one of their own classrooms,
- small group reflection on this experience.

The role of the course tutors was to ensure a supportive, unthreatening atmosphere within which ideas, problems, worries and experiences could be shared in a constructive manner. This feeling of security was crucial to the success of the course, and to promote it the initial session began on a Friday evening and was continued all day on the Saturday. The teachers worked, discussed, relaxed and ate together and, although this made demands on their reserves of energy at the end of a week in school, the participants certainly felt that it bonded them together as a group.

The principal feature of the experimental course was the intention to work initially with the teachers as people and only later to look at their role as teachers. Teaching-style is determined by a variety of factors which can be broadly grouped to include personality, personal philosophy, confidence, experience, and classroom pressures, environment and external demands. Real change cannot take place without attention being given to both the "personal" and the "teaching" factors. How often does a teacher feel able to steal time from marking and preparation to spend an hour or so "playing with a piece of mathematics" or "how does one justify such indulgence to a head of department, one's family or oneself?"

An in-service course can provide the excuse; this particular course also provided the time. The teachers spent over half the course investigating mathematical problems alone or in small groups. They experienced for

themselves initial reluctance, which then gave way to involvement and enjoyment. They also experienced frustration, panic, the need to ask, and the desire to be told the answer. They were encouraged to discuss their mathematical ideas and their reactions to this new way of working. Only then did they work together to plan for one of their classes the investigation on which they had been working.



After the initial weekend, the sessions were at least two weeks apart, in order to allow time for teachers to try out a prepared investigation in their own classrooms. During the course, issues such as mathematical processes, practical working, writing-up and assessment were covered, the last of these being of real concern to all participants. Since the course was of an experimental nature, most of the final session was spent in evaluation. The intended outcome of the experiment was the development of a pack for mathematics advisers and heads of departments, which would enable them to run supportive, successful in-service training.

How does one judge the success of an in-service course? This must of course depend on the initial aims. The long-term goal was that of substantially influencing the participants' teaching styles, and this was examined in a follow-up study of the teachers back in their schools. The more immediate objectives were those of enjoyment, mathematical enrichment and increased confidence for the

teachers. The growing belief in the value of investigations and in personal ability to encourage learning through this way of working became obvious as teachers started to do more than their "one investigation with one class" homework between sessions. The perceived need for such a course was made evident by the fact that it was heavily oversubscribed.

A second course was run in the following term with minor modifications. Some of the sessions being presented by two advisory teachers from draft materials based on the first course. One of these advisers then ran her own course, with considerable success. The follow-up study revealed that all the participating teachers were to some extent now working with investigations in their classrooms. Two factors appeared to influence the depth of their commitment. First, teachers who had attended the course with a colleague from their own school



reported that the support they were able to offer each other eased their path to innovation within their department. Second, holding the course in the autumn term enabled teachers at the final evaluation session to make and carry out resolutions to introduce investigations to specific classes in a planned fashion, whereas those in the summer term were unable to make concrete plans since they did not know their timetables for the forthcoming year.

The outcome of this developmental work is the teacher pack *Investigations in YOUR classroom*, prepared with support from IBM for individual teachers, with a supplement for those wishing to base a course on the materials.

Investigations in YOUR classroom is available, price £6.50 (cash with order) from Dr Susan Pirie, Department of Science Education, University of Warwick, Coventry CV4 7AL.

Dr Susan Pirie teaches in the Department of Science Education, University of Warwick, Coventry.

When does the real training start

is to bring about a change in attitude, educating children to believe that recourse to such equipment to help solve a problem or to help with some calculation is acceptable at any age.

The section of the "GCSE Mathematics Guide" dealing with investigations work includes a useful list of suggestions on how to introduce and develop work of this nature, but lists of "tips and hints for teachers" are very unlikely to bring about modifications in teachers' attitudes to mathematics, and changes in teaching style which are necessary if investigations are to become an intrinsic part of mathematics teaching. Historically, those innovations which have demanded a big change in the teacher's role - usually from "teacher as fountain of all knowledge" or "teacher as enabler, facilitator or fellow learner" - have produced a loss of confidence and an increase in anxiety amongst teachers.

Open-ended investigations work certainly demands that teachers adopt a non-traditional teaching role, and the inclusion of such work is not to become a last-minute add-on to the curriculum. Teachers need to be offered in-service courses where they can develop some of the necessary skills themselves. They need to be encouraged to share their experiences and to discuss with colleagues the

different methods used; to consider alternative approaches to introducing and developing this type of work with children; to share ideas on when and how to intervene when pupils are in difficulty, and to give serious thought to the problem of how to change the attitudes of parents and children towards this "new" concept of what constitutes mathematics.

Even if we assume that the DES in-service programme has adequately prepared teachers for the assessment of GCSE mathematics, it has prepared them for the assessment of activities which do not as yet take place in the majority of mathematics classrooms. The aim of this article has not been to argue for the maintenance of the status quo by demanding the retention of CSE and O level mathematics, or to adversely criticize the highly laudable aims of the new GCSE system. Rather it has been to argue for a substantial input of money from the Government for a comprehensive INSET programme which will help to develop mathematics teachers' confidence in their ability to introduce into their teaching the necessary broad range of activities and classroom approaches demanded by GCSE mathematics. This will necessitate far more money than the £5.5 million recently allocated by the Government to the "Training in the teaching of mathematics" as part of the new INSET scheme which is due to start next April.

It is hoped that this article will encourage teachers to discuss with colleagues the different methods used; to consider alternative approaches to introducing and developing this type of work with children; to share ideas on when and how to intervene when pupils are in difficulty, and to give serious thought to the problem of how to change the attitudes of parents and children towards this "new" concept of what constitutes mathematics.

Follow-on

Integrated Mathematics Scheme, The L. Course for Low Attainers. By Peter Kauer. Book L1 (Year 3) 07135 1367 5 Book L2 (Year 4) 07135 1372 1 Book L3 (Year 5) 07135 1373 X Bell and Hyman £3.95 each.

These three books are a part of the complete *Integrated Mathematics Scheme*. They are designed to follow on from appropriate sections of the Introductory Course which contains work for all levels of ability in Years 1 and 2. Each book is intended to provide a year's work, and to be suitable for courses leading to limited grade CSE (or the lowest grades of GCSE) or a wide range of ordinary courses. They are targeted at the bottom 30% of the ability range, and claim to cover the content of the Cuckcroft Foundation list both directly and in applications of maths to the environment.

Unlike more traditional textbooks, the structure is not one of chapters on specific maths topics, but has been deliberately fragmented to give variety and interest. The basic unit of work is a page, and the subjects of four headings alternate in a cycle of four headings: revision and practice of basic mathematical ideas, applications to the real world, development of new maths, and mathematical games and puzzles. A great deal of effort has been put into making maths lively, interesting and relevant, and in creating books which are attractive to work from.

From the visual point of view, these books are a great success: frequent use of colour photographs and clear diagrams make attractive pages. The contexts used are presented in a way which gives obvious and substantial application of basic ideas, and these pages could provide the starting points for much more extended pieces of work. The calculator is used extensively from page one, and there is a wide selection of calculator games and activities.

Two reservations about the books diminish my enthusiasm somewhat. The fragmentation is not accompanied by any system of indexing or reference so that there is nothing to help the teacher, or the pupil, who wants to find work either on a particular theme or a particular mathematical topic. In the hands of experienced teachers who know the scheme well this may not matter so much, but in other hands it is easy to see the situation degenerating to individual pupils working page after page.

Equally, the strongly didactic tone of the text leaves almost no space for the pupil to find out anything for himself, and puts a burden of explanation firmly on the teacher. The "mathematical" pages present bold facts and skills (perhaps assuming they will already be at least partly mastered) whose real understanding the books do not help to establish - only their practice.

Looking at the needs of GCSE, and the influence it must have on courses for most pupils, the IMS as a whole takes its place as a strong contender for consideration as the major resource for a maths department. Mr. Kauer's feeling that a book course is what most teachers want is undeniable - but I suspect they want it because that is what they are used to, and teachers by and large are conservative. But books present the least flexible alternative, and a format which is inevitably teacher-centred. The growing move towards extended course work, begun by mode 3 CSE and now accelerated in GCSE, requires pupils to take more responsibility for their own learning, more decisions; on how they should work and in which direction, and requires more flexible materials and resources, carefully catalogued and referenced both by topic and context.

Peter Moody

Edward Arnold publish at £2.50 each a series of examination aids compiled by R. H. Evans. They cover A level Pure Mathematics and Statistics, Pure and Applied A level Mathematics, O level Mathematics and O level Physics. The first three, each contain 50 questions selected from recent University of London or AEB papers; the last has 20 such questions. Full solutions are provided and the whole represents a helpful guide to what pupils may expect and should do.

This newsletter has been inserted at the expense of the School Mathematics Project and Cambridge University Press to keep teachers and others involved in mathematics education abreast of the Project's activities.

10th October 1986 No.25

smp news

SMP 16-19 Project Director Appointed

The new SMP 16-19 Project Director is Dr Stan Dolan. Dr Dolan joins SMP from Kingswood School, Bath, where he was Head of Mathematics. He was educated at Eccles Grammar School and University College, Oxford, where he held a Junior Research Fellowship before entering teaching. The preliminary aims of the project will be:

- To make A-level mathematics accessible to a wider range of students. Nowadays, two-thirds of students of A-level mathematics leave school to follow courses or careers outside the field of maths and physical science, and so it is important to re-evaluate the objectives of maths education in the sixth form. Moreover, it is essential to attract more students to A-level mathematics to feed higher education courses in maths, science and technology.
- To consider the impact of new technology. Technological changes are affecting the mathematical needs of society, and micros are providing opportunities for enhancing the learning process.
- To take account of the impact of curriculum developments from the 11-16 age range.



Dr Dolan would like to stress that the project aims to provide more than just an integrated package of syllabus and teaching materials. As with all SMP courses, the 16-19 Project will address itself to the in-service requirements of teachers adopting the course. A-level mathematics has appeared to many students to be little more than a succession of seemingly unrelated techniques. The project will aim to encourage the variety of learning styles advocated by the Cuckcroft Report.

How do you think A-level should change in the 1990s? Write to Stan Dolan at the SMP Office.

SMP 11-16 User Groups

Throughout the country, groups of maths teachers are meeting with a common interest - SMP 11-16. The agenda of these meetings will vary according to the perceived needs of those involved. The idea of these user groups is for teachers to pool their ideas and experiences in implementing the course. So far, 25 such groups are known to us. Adoption of the course has been widespread throughout Britain. Already, over 1500 secondary schools are using SMP 11-16, including English schools overseas in Gibraltar and Hong Kong.

If you would like to form a user group in your area, contact the SMP Office, who can supply a list of schools in your area who are using the course.

SMP 11-16 User

The second edition of this newsletter will be published later this month and sent to all schools on the User File. Extra copies of SMP 11-16 User 1 and 2 are available from the SMP Office, price 50p each. Offprints of SMP News are available free of charge, on receipt of a stamped addressed envelope.

SMP 11-16 General Course

April 13th-16th Sheffield Polytechnic. This course aims to cover a broad range of in-service needs relating to SMP 11-16 materials and assessment. Details can be obtained from Mr D Fenton, 4 Canterbury Avenue, Fulwood, Sheffield.

Accreditation Courses

These courses provide Accreditation for teachers who wish to use the Graduated Assessment Scheme, an assessment designed for use in Years 4 and 5, in conjunction with the Green Course of SMP 11-16. Details of this scheme are available from the Oxford and Cambridge Board, 10 Trumpington Street, Cambridge CB2 1QB. It is estimated that over 500 teachers will be accredited by the end of this year. In addition to nationally available courses, local courses are being organised through LEA advisers.

National Courses

October 27th-29th Barnsley (course full)
January 2nd-4th Bristol
April 22nd-24th Bristol
(venue and dates provisional at time of publication)
For details of these courses contact Mr J Hersee, 76 Pembroke Road, Bristol BS8 3EG.

LEA Courses

November 8th & 15th Coventry
November 22nd-23rd Cambridge
November 28th-29th Devon
For full details of these courses contact your LEA adviser.

SMP Project Grants

The SMP Trustees have agreed to offer a limited number of Project Grants to support classroom research and development related to the work of the Project. These awards will normally be in the range £500-£1000. A professional tutor from SMP will be assigned to each project to offer professional guidance. The awards will be made annually; renewal of awards for promising projects will be considered.

Proposals for these awards should be submitted to the Executive Officer of the Project, Mr C Little, by 1st December 1986. Applications should contain a detailed outline of the proposed work.

A-Level - Medium Term Developments

SMP 16-19 will not be published until the 1990s, so SMP recognises the need to maintain and adapt its existing A-level courses and syllabuses in the medium term.

Revised Advanced Mathematics - New Edition

A new edition of *Revised Advanced Mathematics* is in the process of publication. In order to limit the need for schools to buy new texts, the new edition of volumes 2 and 3 includes minor amendments only, which replace work such as logarithms (for calculation with calculator-based methods).

However, volume 1 is being completely rewritten by a team of 15 teachers, the aim being to provide an introductory A-level text which will be easy to read, and which indicates numerical calculator - or micro-based approaches to calculus and other topics. The curricular context will be similar to *Revised Advanced Mathematics* volume 1, but the new text gains expanded treatment. It is intended that the text will be available for the first post-GCSE sixth-form cohort SMP A-Level.

Discussions are in progress on how to modify the existing syllabus to encourage more post-GCSE candidates to study A-level mathematics. A working group has been formed to frame firm proposals for presentation and discussion with representatives from schools doing SMP A-level next year. If you have any comments on this topic, please send them to the SMP Office.

SMP Further Mathematics

The syllabus for 1988 has now been approved and details will be sent to schools and centres soon. The new syllabus is, at the time of writing, in draft form and is available from the SMP Office.

The alternative assessment scheme comprising a project and a comprehension paper will be operational in June 1987 - details from the SMP Office.

Monitoring Committee Reports

SMP continues to monitor SMP GCSE examinations, as well as the joint GCSE/CSE 16+ assessment in Mathematics (SMP). If you have any comments on these papers, or would like to help in preparing reports, write to Chris Little at the SMP Office.

GCSE Developments

SMP 11-16

As previously announced, this GCSE syllabus has National Project Status, and candidates may be entered through all examining groups. The conducting group is the Midlands Examining Group, in association with the London and East Anglian Examination Group. For copies of the syllabus and specimen assessment materials, write to the University of Cambridge Local Examinations Syndicate (address below).

Phase 4 training programme

A series of training sessions is being held throughout the Autumn term. These are being organised through the Midlands Examining Group and the London and East Anglian Examining Group, with training materials and tutors provided by SMP. The aim of the courses is to analyse in some detail the assessment of two coursework tasks from the coursework programme. All tutors have first-hand experience of administering the coursework in their schools. Owing to pressure of numbers, it will be possible to accommodate only one teacher from each school on these courses.

For further details, contact Elizabeth Mills at the Cambridge Local Board.

'Traditional' SMP

The Midlands Examining Group, the Northern Examining Authority and the London and East Anglian Group have all now published syllabuses appropriate for schools using 'traditional' SMP materials (Books A-H, 1-5, New Books series). For syllabuses and past papers, write to the Boards of the appropriate examining group.

MEG SMP 'Mode 2' Coursework Option

As highlighted in previous issues of SMP News, an SMP working group has developed a coursework assessment component for schools taking the MEC Mathematics (SMP) GCSE. It must be stressed that the scheme is experimental, but it is hoped to provide some in-service support for schools entering the scheme. Details of this option, together with specimen assessment materials, are now available from the Cambridge Local Examinations Syndicate.

News of Publications

SMP New Numbered Books

New Book 1 Part 1
New Book 1 Part 2
New Book 2 Part 1

October 1986
early 1987
mid 1987

SMP 11-16

Book B2
Teacher's Guide to Book B2

October 1986
December 1986

Book C6
Teacher's Guide to Book C6

October 1986
October 1986

Teacher's Guide to Book Y8

October 1986

Book B4
Worked Masters for Topics B4, B2 and Y4

December 1986
December 1986

Further Mathematics series

Mechanics and Vectors
Statistics and Probability

December 1986
May 1987

For more information, contact Elizabeth Wilson at Cambridge University Press.

In-Service Resource Kits

All twelve of these kits, which are suitable for all kinds of in-service work, are now available. For further details and order form, write to the SMP Office.

Useful Addresses

For general enquiries and GCSE syllabuses:

SMP Office
University of Southampton
SOUTHAMPTON SO9 5NH
Tel: 0703 599122 ext 3496

For post GCSE examination papers:

Oxford and Cambridge Board
Elfield Way
OXFORD OX2 8EP
Tel: 0185 544221

For GCSE enquiries:

Contact either your local board or University of Cambridge Local Examinations Syndicate
1 Hills Road
CAMBRIDGE CB2 2LU
Tel: 0223 611111

For information on GCSE entry and the

Graduated Assessment Scheme:

Oxford and Cambridge Board
10 Trumpington Street
CAMBRIDGE CB2 1QB
Tel: 0223 64326

For details of SMP publications:

Cambridge University Press
The Edinburgh Building
Shaftesbury Road
CAMBRIDGE CB2 2RU
Tel: 0223 312393

New for GCSE

UNDERSTANDING MATHEMATICS

C. J. Cox and D. Bell

Shows every sign of being thoroughly researched, designed and tested for ease of use by the teacher and enjoyment of learning by the pupil. *Mathematical Gazette*

- written to meet syllabus requirements for all GCSE Groups
- already widely adopted
- simple to use, with open, easy-to-read pages
- suitable for a wide ability range
- full support from highly comprehensive Teachers' Manuals
- calculator usage and computer programs incorporated
- arranged in two self-contained parts - Foundation Course (Books 1-3) and Certificate Course (Books 4 and 6)

Foundation Course: Books 1-3 now available

Pupil's Book £3.95 each Teachers' Manual £12.50 each

Certificate Course: Book 4 now available

Pupil's Book £4.50 Teachers' Manual £15.00

Book 5 due Spring 1987

Pupil's Book £4.50 Teachers' Manual £12.50

probable price only

GCSE

We have prepared detailed documents to show how *Understanding Mathematics* fulfils syllabus requirements for each GCSE Group. Please write for your copy, stating which group(s), to Judith Reinhold, John Murray, FREEPOST London W1F 7JZ. A complete topic matrix and inspection copies are also available on request.

JOHN MURRAY

80 Albemarle Street, London W1X 4BD

GCSE: Investigations as coursework

Alternative forms

There is an irrefutable case against assessment only by time limited, written examination papers. This has been accepted by some mathematicians for a long time, strongly hinted at in the Cockcroft report and put very clearly in the Assessment Objectives of the National Curriculum.

Put simply, the argument is that there are aspects of mathematical activity which cannot be adequately assessed by traditional methods. For many of us this is not easy to see; precisely because our mathematics is that which we have been taught in order to pass (or fail) written papers. Our view of what mathematics is about can be very restricted.

In schools we are charged with the responsibility of offering all pupils the full range of mathematical activities. Assessment should be based accordingly and not on only part of the range. The case against the dominance of written papers is the case for introducing alternative forms of assessment - including a coursework element.

The strong case in favour of retaining assessment by written papers is that in a sense they are fair, offering a reasonable measure of objectivity and uniformity of standards. As we broaden the curriculum to take on board investigations, group activities, practical work and all that will be part of GCSE assessment, mathematics teachers will be called upon to make judgements which are far more subjective than we have been used to. In turn this will call for strict processes of moderation, perhaps at school, area and regional levels. It would be wrong to expect overnight miracles. We must face a period of development, training and just learning through the experience of doing.

Part of our learning experience will come through organized training and in-service. We may also gain much of value through discussion with colleagues outside mathematics. It is true that what is new as far as mathematical assessment is concerned is now old hat in some other disciplines. But the most important part of our learning experience must come in doing the work with pupils, meeting colleagues and establishing criteria upon which we make judgements and establishing a consensus of opinion.

What is presented now is one possible coursework task, with a few ideas about the sort of things we could be looking for when we assess pupils' performance.

The Football Scores Investigation
A football match finishes with a final score of 3-1. You are asked to investigate:

- the total number of possible half-time scores,
- the possible routes to this final score (one route is 1-0, 1-0, 2-0, 3-0, 3-1).

Generalize your results for any final score.

As presented here, the football scores investigation is fairly closed, although we can open it out later. If a match finishes with a final score of $n-m$ then:

the total number of half-time scores is $(n+1)(m+1)$ and

the total number of routes to that final score is:

$$\frac{(n+m)!}{n!m!}$$

A closed investigation will be bound by content and we can award marks for this content. We can however also assess some of the processes used by pupils.

Logical ordered thinking
Some pupils will almost certainly attack the problem in a random fashion, others will be much more orderly in approach. It must be made clear that there may be occasions when a pupil is:

able to do something but unable to communicate this in writing

With coursework we can award credit for what we see happening as well as or as an alternative to what is written

DAVID KENT

might. Evidence of a logical approach might be seen if a pupil sets up the possible half-time scores for 3-1 as:

0-0	1-0	2-0	3-0
0-1	1-1	2-1	3-1

Indeed, setting out the half-time scores for a final result of $n-m$ as:

0-0	0-1	0-2	...	0-m
1-0	1-1	1-2	...	1-m
2-0	2-1	2-2	...	2-m
...	...	...	...	...
n-0	n-1	n-2	...	n-m

gives a visual proof of why the general result is $(n+1)(m+1)$.

Generalizing
The word generalizing will become of increasing importance in school mathematics. Within the context of a differentiated curriculum, fundamental to Cockcroft and GCSE, it would be wrong to think of generalizing only in relationship to symbolic forms. Experience suggests that there are three or four broad levels of generalizing. We can illustrate these with the half-time scores.

Generalizing in symbols
At the highest level some pupils will generalize symbolically by stating that for a final score of $n-m$, the number of half-time scores is $(n+1)(m+1)$.

Generalizing in words
There is a level, lower than the one above, where pupils can generalize but not use symbols. They might write - or tell you - that number of half-time scores is:

"You add one to each score. Then you multiply these numbers together".

Generalizing by example
You can also expect to find some pupils who will generalize but use neither words nor symbols. We might have to ask them to do an example like taking a game that finishes 9-7. They are likely to compute:

number of half-time scores:

$$\begin{aligned} 9+1 &= 10 \\ 7+1 &= 8 \\ 10 \times 8 &= 80 \end{aligned}$$

This is written here to look clumsy - pupils often write like this. But it shows evidence of being able to generalize.

Of course, there will be some who do not generalize at all.

Strategies used and encouraged
It would be quite unreasonable to expect many (or any) pupils to obtain the result

$$\frac{(n+m)!}{n!m!}$$

In part 2. However, it would be good teaching to encourage the inductive approach in pupils, so that they adopt a strategy such as looking at:

number of routes to $n-0$ is number of routes to $n-1$ is number of routes to $n-2$ is

$$\begin{aligned} 1 \\ n+1 \\ (n+1)(n+2) \\ 2 \end{aligned}$$

and perhaps even:

$$\frac{(n+1)(n+2)(n+3)}{6}$$

At this stage some might even guess (conjecture) the result for $n-m$ as:

$$\frac{(n+1)(n+2) \dots (n+m)}{m!}$$

Forming conjectures
We need to move away from the view that everything in mathematics is either right or wrong. The subject has developed through a process of conjectures

turing - with proofs or refutations. Some pupils on seeing that for a score of 3-1 the total number of routes is 3+1, will suspect that for any score:

"the number of routes is given by adding the scores together"

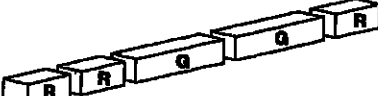
This is not wrong - but a conjecture in need of testing. It will be seen to work only in the case where a game finishes n-1. But if a pupil puts forward a conjecture and either proves or refutes it, then we should give credit. This is a fundamental mathematical strategy.

Extensions of the problem
No really good problem is ever fully solved. Each one has the capacity to create others. For instance, we could extend Football Scores to Rugby Scores with six points for a goal four for a try, three for a drop goal and penalty. We can, and indeed should, encourage pupils to develop their own extension work.

Recognizing equivalent systems
The ability to recognize equivalence in two seemingly different systems is fundamental to mathematical work. Football scores can be offered in many guises. Here are three:

a) **Cuisenaire activity**
(This particular version has been undertaken in primary schools.)

With 3 red and 2 green Cuisenaire rods we could lay them out as a rod-train:



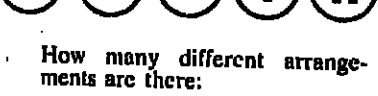
or as

How many different rod-trains could we make?

b) **Heads and tails**
Three coins are placed facing heads and two facing tails. One possible arrangement is:



whilst another is:

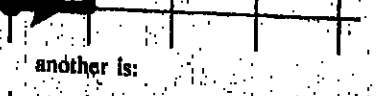


How many different arrangements are there?

c) **Routes on a grid**
We wish to examine the number of routes from the origin to the point (3, 2) on a square grid. We can move only along grid lines and only in the positive direction. One such route is:



another is:



Not only should we encourage pupils to recognize such equivalences, but also we must award credit in our assessment schemes when they do.

Closing remarks
Future historians of education will surely look upon the 1980s as the era of assessment-led curriculum development. Whether the move will prove to be successful only time will tell. GCSE is about more than the content and form of assessment it is about creating a national forum for changes in the methodology of teaching mathematics.

It does little however, to create the necessary emotional and attitudinal changes required.

I appreciate that in such a short article, it has been possible only to touch the surface of what is probably the most contentious and important issue to face mathematics education for years. But perhaps that is not a bad thing, for, as I said earlier, we are all facing a period of development and learning. While it would be fatal to stand still we must be sure of the forward steps we make - and that takes time.

David Kent is mathematics adviser for Suffolk, and chief examiner for GCSE mathematics coursework for LEAG

Solve it

Problem Solving and Investigations by David Wells.
Rain Publications, 6 Camarthen Road, Westbury-on-Trym, Bristol BS9 4DL. 50p, post free.

Let's Solve Problems by Ray Batlands.
Basic Blackwell, four books containing photocopy masters, £9.95 each.

David Wells's pamphlet, *Problem Solving and Investigations*, is a discussion document for teachers and others involved with maths teaching. It is a thoughtful booklet which challenges a number of conventional views currently adopted within the profession. Teachers presently grappling with the new GCSE syllabuses will be very much concerned with developing project-style coursework and assessing it. Investigations are likely to figure in this development and anything which helps discussion will be useful.

First the author deals with the lack of clarity with which the term "problem solving" is frequently used, and then goes on to discuss the origins of the so-called "data/pattern/induction" model of the investigation process which lies at the heart of so much contemporary advice on both teaching and assessment of investigation work. Indeed he is critical of the fact that this model is often narrowly perceived as the only model one should use. He finished his booklet with a chapter on seeing pupils as researchers in mathematics and discusses the extent to which they can or cannot achieve this role.

Roy Holland's books do not really deal with investigation problems solving but are not irrelevant to those interested in such work. The theme of the series ranges from mathematics to a (fairly) real-life context to aspects of number puzzles, all of which are problem-solving. The books consist of single-page worksheets which can be photocopied for pupils' use.

Much of the material consists of very specific questions, some related to more extended problem solving, broken down into "structured" and "unstructured" stages. Many pupils do indeed experience difficulty with application of maths to real-life context, and find puzzles hard to do without guidance. This series will help them get off the ground and move towards independent thinking.

The four books cover different ranges: around eight, around nine, to eleven, and eleven to twelve. On the whole, they provide interesting and useful supplementary material for any maths scheme.

Andrew Roberts

The IMPACT Project: progress report*



Ruth Merttens with parents and teachers at an IMPACT meeting

Chorus of assent

RUTH MERTTENS • JEFF VASS

The IMPACT Project, an experiment in parental involvement in mathematics centred on the Polytechnic of North London, has now been running for nearly a year and we are now in a position to comment upon the effects on the children, parents and teachers who are involved.

The level of parental involvement has been astonishingly high, remaining throughout the year at the same sort of levels that have come to be associated with parental involvement in children's reading. All the class teachers with whom I have been working over the past year are keen to continue or to increase their commitment to the project, and we have a long queue of schools who are anxious to become involved but whom we are unable to assist due to lack of resources.

The actual day-to-day organization of the project has altered surprisingly little over the year. Each half term, we plan with the teacher the maths curriculum for the class. We isolate particular activities which could be done at home but which nonetheless form an integral part of the classwork. Materials are then designed, constructed and brought back to the class teacher.

Each Friday the children take home the activity appropriate to that week's classwork. The feedback from the weekend's task consists of the product from the activity and parents' responses. On the basis of this feedback the teacher modifies the classwork accordingly. Every four weeks or so parents come to discuss in quite specific ways the activities that have been undertaken at home and any mathematical difficulties that have arisen.

The half-termly planning with teachers constitutes a substantial INSET. These sessions encourage detailed planning of many aspects of the term's work. The discussions generate increased confidence in maths and in addition, the effect of planning a proportion of the maths to be covered as home-based activities requires the teacher to consider the relevance of the mathematics itself to the home situation and beyond.

These INSET sessions form a welcome opportunity for teachers to discuss the children in their class and their own insecurities with regard to mathematics. The fact that this project provides individual in-service training of this nature seems to make it a much more attractive proposition for teachers than it would otherwise initially be. There is no sense in which the INSET component of IMPACT has proved to be incidental to the project to date. We feel that the inclusion of an INSET package will be a common feature in projects that attempt to establish this type of parental involvement in schools.

The experience of IMPACT suggests that when parents are involved in their children's maths learning in school, both the teachers and the parents benefit enormously from the exchange.

We have been evaluating parental responses to IMPACT through three main vehicles. The first is the use of printed evaluation sheets which go out with every Friday's activity and which each parent and each child fill out separately. The second is by recording

in mathematics in a way which complements and reinforces what is going on in class, rather than contradicting it. Furthermore, during the regular meetings between ourselves, the teachers and the parents, we find that we are all discussing particular points raised by the last four weeks' work, in class and at home.

The studies in both Coventry and Haringey concerning the effects of sustained parental involvement upon the reading ages of the children involved give a clear indication of the type of result we might expect to get from a similar integral involvement of parents in their children's maths. We have been looking very carefully throughout this pilot project at how the children's mathematics improves and also at how this can be measured. It is clear already that children involved with IMPACT seem to gain remarkably in mathematical confidence. Our preliminary findings show that these children instigate mathematical experiences: they introduce mathematics into what otherwise might be non-mathematical situations; they are more inclined to develop their own algorithms and they adopt a generally more flexible and positive approach to the whole subject.

Certain aspects of the data suggest that they have also made remarkable strides in terms of mathematical development. Number bonds, numeral recognition, appreciation of ideas of symmetry and shape, and especially their understanding of all types of measure and their ability to estimate, all progressed extraordinarily fast. The children also possess an ability to transfer skills which is quite unprecedented in my experience. Moreover, many parental comments concern the fact that all the children talk about maths a great deal. The maths that they are learning at school would appear not to remain a classroom subject in the way that it often does.

A description of a pilot project like this one would not be complete without a mention of one crucial fact. The vast majority of the children, parents and teachers taking part in this project have enjoyed it very much indeed. Most parents have taken time and trouble to assure us how much they are enjoying the project and what a great deal they are gaining from it. The teachers with whom we work are more positive about IMPACT than we would have dared believe possible and the children, from their written comments, from their conversations and from their faces as they take home their work and bring it back into class give us the most positive feedback of all.

This year has been harder work than we would have ever imagined, but there have certainly been moments which have made up for it all. One we shall remember was the parents' meeting in a school with not a single professional family on the role. One father said that one of the things that he found surprising was the extent to which his son pestered him to do the weekend's maths. Another woman reported that her daughter refused to come down to tea on a Friday unless her parents had at least started her maths. The chorus of assent when we asked if it were generally true that children pestered their parents to do the activities rather than the other way round, was unmistakable.

Perhaps the most poignant and worrying moment of the whole year came last week, when a parent told us anxiously that her daughter was moving up to a new class in September and she really wanted her to go on bringing "this maths stuff home because we all enjoy it, see." The answer is that we do not know if the project will be able to continue next year and whether the research which we have only just begun will be followed up at all. But we very much hope so.

Ruth Merttens and Jeff Vass are joint co-ordinators of IMPACT.

*See also "Bringing Parents into the Equation" by Sarah Bayliss in *The TES* January 3, 1986.

PRIMARY MATHEMATICS BOOKS FROM CAMBRIDGE EDUCATIONAL

Will Gulliver's Suit Fit?
MATHEMATICAL PROBLEM SOLVING WITH CHILDREN

Dora Whittaker

This book has been written to show how a problem-solving approach can be used to teach mathematics to children. The author has great experience of using this approach both in the UK and North America. The book is packed with examples and gives details of children's activities, ideas and thinking in response to problems posed. These examples of children's work make the book warm, lively and highly readable, and show just how successfully the problem-solving approach can work in the classroom.

0 521 31490 9

Paperback £4.50

IMP Infant Mathematics Project



Jean Clark, Alice Dickson, Roy Edwards, Barbara Hewett and Barbara White
An activity based mathematics course for the infant years

- * 3 units for 4-7 year olds
- * Easy-to-use Teacher's Books each cover a specific topic in a unit
- * Workbooks and Workcards provide written consolidation and practice
- * The colourful Games Pack includes games on all maths topics
- * Rhymes Pack for Reception Group
- * Imp links in with other curriculum areas

Teachers! Evaluate Imp in your school

To: Elizabeth Wilson, Inspection Copy Department, Cambridge University Press, Freeport, P.O. Box 110, Cambridge CB2 1BR

☐ Please arrange for me to receive a loan pack of the Imp course

Name

School

Address

Postcode

Full colour brochure and our Primary Catalogue are also available on request

CAMBRIDGE UNIVERSITY PRESS

THE PENGUIN DICTIONARY OF
257 CURIOUS and interesting NUMBERS
DAVID WELLS

A multitude of fascinating facts about numbers, numerically ordered, from zero and unity to the giant primes and Graham's number... a compendious collection to delight and entertain, which will be an ideal resource book of ideas and investigations for teachers.

00.8029 5 £3.95

For an inspection copy of this book, or further information about Penguin's Mathematics files please write to: The Educational Marketing Department, Penguin Books Ltd., 27 Wright's Lane, London W8 5TZ

DO YOUR CHILDREN KNOW THEIR TABLES?

Even in the computer age, children are disadvantaged without this basic knowledge. Whatever their age, your children will love these tables because each one is set to a different catchy DISCO BEAT. With our new approach to maths, learning tables has never been so easy or so much fun. Children just play this music cassette and sing or dance along. All tables from 2 to 12 are included - and thoroughly tested. (TABLES DISCO) recorded on stereo quality cassette @ £7.95 including VAT and postage and packing. Send Cheques for £7.95 payable to: EDUCATIONAL DEPT TES10, P.O. BOX 81, Wembley, Dorset BH9 1ST and enclosing your name and address. Expect delivery in 21 days.

EXTRA

Every child can succeed

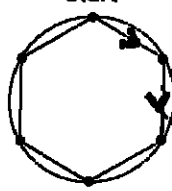
Playing Passola

JANET HAGER

A headteacher of a very small primary school in Suffolk, I was aware of the need for my children to be involved with larger groups of children in other schools. It was in one such school visit the children were introduced to the game of Passola. This was the starting point for a series of mathematical investigations when we returned to our school.

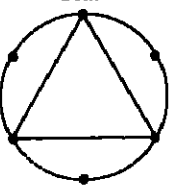
Initially, the game involved a group of six children standing around in a ring with one of them holding a football. Then they played Passola. The idea was that they passed the ball amongst themselves according to varying rules. In step 1 of six person Passola, they passed the ball to the next person on their left so the path of the ball was something like this.

Start



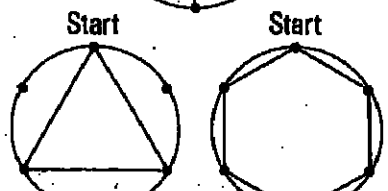
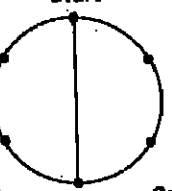
In step 2, they passed the ball to the next but one person on their left:

Start



Then followed steps 3, 4 and 5.

Start



Moving on to seven-person Passola, following the same sequences, more and varied shapes and patterns occur. For instance, step 3 of seven-person Passola gives:

Start



After this, questions about n person Passola, step n can be posed, such as: (a) Predict patterns and shapes made; (b) Work out which people will or will not receive the ball, and after how many passes; (c) State the relationship between n and m which determines whether or not all the people receive the ball.

At this stage I began to wonder how I could use and adapt the idea of Passola in school so that all of the children, regardless of age or ability, could manage to succeed at some aspect of it.

I started with the idea of the throwing of a ball, giving the children plenty of opportunity to practise the skills involved. As all of us concerned with children know, there is always a minority who find even the most basic task difficult, and we were no exception! On many occasions the ball failed to reach its destination, bouncing and splashing in puddles in the playground. This, incidentally, led to unforeseen opportunities for investigations into environmental studies and science! Eventually we all agreed that if we sat down and rolled the ball to each other, we would be more likely to achieve the required results.

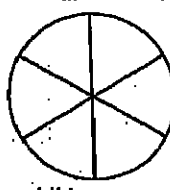
Following on from ball throwing, we went back into the classroom to commit to paper the shapes we had just made. All of the children were involved in drawing the patterns as accurately as possible, using rulers and sharp pencils (no rubbers!).

To make things easier each child was given printed sheets with dots representing the people.

Then followed a number of discussions about these drawings, for example:

What is the relationship between the number of lines and crossovers? What is the relationship between the number of lines and number of angles? Why were some patterns repeated? (The discussion is only limited by the imagination of the teacher.)

Each child, using a compass, was asked to draw several circles. Unfortunately, even after prolonged practice, there were still one or two who could manage no more than a rather uneven spiral, so plastic circles were brought into use. After all the children had drawn a circle of a given diameter on cardboard of varying thicknesses, they then proceeded to divide it into as many segments as people playing a game of Passola.



All the children were given the opportunity to use protractors, calculators, Unifix bricks, beads, shells and even Smarties to make their calculations. (Beware of using Smarties except for the very strong-willed - the

results tended to become more inaccurate as temptation grew!).

This circle was then cut out (almost perfectly) and placed on another sheet of cardboard. Faint marks were made wherever a radius reached the circumference (and these words were used when speaking to the children). After removing the circle, a needle was then pressed through the marks, leaving a number of holes. The children, having a free choice of thread and needle size then transferred their drawn patterns in thread on to card. None of the children were given any help at this stage, apart from threading needles and tying knots. They all managed, regardless of age or ability, to reproduce their patterns perfectly.

Several of the older children then wanted to use some other medium to achieve a similar result, so art straws were introduced. If all of the straws used were the same length the finished shapes would vary enormously in size, so yet more calculations were needed to ensure a uniformity that the children themselves requested.

While this was going on, a discussion was developing amongst the younger children.

"It was good when I threw the ball and you dropped it."

"I made a big splash in that puddle."

"My mum will be mad when she sees my socks - they're new."

"Didn't the ball roll a long way? It made those wet lines go all over the place."

"They didn't make any shapes then! We should have kept on dropping it, so we didn't have to come in and do those drawings."

Then, after a pause,

"They must have made some shapes."

"Yes, some shapes, but not ones we can draw."

"We could if we saw where it went."

"Not if the water dried up we couldn't."

And so on.

We tried it again in the classroom. I suggested that the children throw the ball to each other when it was dropped (or missed completely) and would watch to see where it went. After 10 minutes of frenetic activity and the most appalling throwing and catching ever seen in school, we decided to limit the space used to half of the classroom, and, to add interest, we soaked the ball in water before throwing it.

The next quarter of an hour needs no description! More rules were introduced. What would happen if the ball, which as every five-year-old knows is "round", was confined within a circle? What shapes would we see? Trays and hoops were then brought into the activity.

Sheets of plain paper were placed under hoops and in trays and the balls rolled around at will, now soaked in paint. Perhaps the most startling of all the comments made by the children was by one of the youngest, who has special learning difficulties:



If there is no restraining edge the ball frequently falls off

"Look, look, it's like magic."

"Look, this ball's round and the hoop's round, but look, look what's happened. I've got straight lines and corners all over the paper."

This alone leads to enough valuable language development to make the topic worthwhile. Whilst our attention was being given to this exciting discovery, another child found that if a tray is turned over so that there is no restraining edge, it is more difficult to control the path of the ball and it frequently falls off!

What emerges is a series of "spots" in various colours across the classroom floor. The children, not quite believing their luck that their teacher, not only was not reprimanding them but actually encouraging them in their task, set to work with a will. (Obviously this would need to be a playground activity in schools without washable floors.)

Paint-floated tennis balls were dropped from knee level, waist level, shoulder level, head level and standing on tip toe on a table level and although the sizes and the number of spots varied, they all had certain characteristics in common. The first spot was large, the second was small.



"Look, look it's like magic"

ler, the third was smaller still. The third was closer to the second than the second was to the first, and so on along the path of the ball until there was a continuous line of paint (usually disappearing under the piano) where the ball stopped bouncing.

What opportunities there were here for innumerable measuring activities, using such diverse materials as tape measures, rulers, Cuisenaire rods, shoes, handspans, etc. And what problems there were when deciding where the actual measurement should start and finish. Should we begin at the centre of the spot or from the edge? Where did the edge begin? Where did it end? The amount of mathematical, scientific and creative investigation which came from an apparently simple activity was endless, limited only by the amount of time available.

Our investigations took place over a period of several weeks, providing a source for much exciting work, and even then we had by no means exhausted all the possibilities.

Mrs J. Hager was headteacher at Stoleby-Claire School, Suffolk. She now teaches at St. Gregory and St. Peter's School, Sudbury.

Model maths

Motivating A level mathematics. £12.50 019853653 4 Realistic Applications in Mechanics £12.50 019853654 2 Decision Mathematics £9.90 0174580078 The Spode Group

These three books are wholly welcome. They are the latest publications from the Spode Group, a group of mathematical modellers from secondary schools and higher education. The group develops its material at weekend working meetings at the Dominican Priory at Spode, Staffordshire under the leadership of Prof David Burgess of Exeter University. The present books are concerned with applications in A level mathematics. This is an area which has largely been ignored in recent years, and there is no general consensus as yet as to what "A level applied" ought to be like in the future. Although the "applied equals mechanics" school of thought is now less prevalent, the question remains open of whether applied should include both mechanics and statistics, and whether other applications areas might be appropriate as well as, or instead of, these.

The first two books, *Motivating A level Mathematics* and *Realistic Applications in Mechanics* are both concerned with revitalizing standard areas of A level content. Both are directed at teachers as source books, and very helpfully, reproduction permission is freely given for class use of individual pages. Both are brimful with stimulating ideas, and any A level teachers tackling integration by parts for the first time will find a lot of new ideas here to get their teeth into. There is some overlap in content between the books, but both would be good to have (providing you can afford them). *Motivating A level Mathematics* is in four sections: Functions, Calculus, Mechanics and Probability and Statistics. Typical topics include "Party representation" and "Stereotypes" (Functions), "Carbon dating" and "Drug absorption" (Calculus), "The tennis service" (Mechanics) and "Intelligence Quotients" (Probability and Statistics). Some of the topics, eg "Party representation" and "IQ" might even stimulate teachers and pupils to some critical discussion of the social implications of these analyses (eg "should a true 'democracy' have a sigmoidal (non-linear) representation function?" and "What assumptions lie behind definition of IQ?"). A generation on, we seem to have made no headway in bridging CP Snow's "Two Cultures": some of this material perhaps indicates a direction in which we might do so.

One of the strangest things about traditional "applied" (ie mechanics) was that students never actually did any experiments. The recent Leeds University Mechanics Project (described by Julian Williams in the

current issue of *Mathematics Teaching* No. 116) has taken this on board, and it is good to see that in *Motivating A level Mathematics* some experiments are suggested. In the companion text *Realistic Applications in Mechanics* the strange world of surrealism, inelasticity and weightlessness is held at arm's length, and the view espoused that "mechanics should be an interplay between experience and experiment (the real world) on the one hand and fundamental concepts (the mathematical world) on the other." Rather disappointingly, however, no experiments are suggested. Nevertheless the material which revolves around the three topics of Sports, Driving and Further Applications (a miscellany) should again be a very useful teacher's resource. In both books the mathematical level is sometimes rather demanding which might raise problems of timing: teachers using the material will need to exercise some judgements about what can be used when. Both books break new ground for texts at A level by having references to other books! This should at least warm the heart of the HMI who produced "Mathematics in the Sixth Form" (1982) who are very critical of this point. No mathematics department which is taking its A level work seriously should be without these two books.

Decision Mathematics, which grows out of the same Spode philosophy is however a rather different text: all of the content areas here are foreign to most A level mathematics syllabuses. The simple exception is the new A level mathematics option in "Decision Mathematics" recently developed by the Oxford Local GCE Board, and for which this book has been partly conceived. However, much of this material is currently also studied at undergraduate level, and is essentially *algorithmic mathematics*. The area of content include sorting, packing, linear programming, game theory, graphs and networks, recurrence relations, coding, critical path analysis. These are the mathematical topics which are currently amalgamating (or, at least, being flung together) under the label of "discrete mathematics", and argued to be appropriate to the needs of computer scientists. The algorithms discussed in the text are presented discursively via specific examples. No attempt is made to present a non-language-specific program to represent each algorithm. There is however a suit of programs (which I have not seen) for the BBC Micro to accompany the text which are intended to explain the algorithms and provide a problem-solving package.

The whole text is engagingly written, has simple examples, useful exercises, with answers, and ought thus to make a very useable student text. Spode and the Oxford Board are to be congratulated for this development which, seems to represent the only really innovative thinking about A level mathematics since the convergence of the SMP and MEI projects over 20 years ago. I would venture that much of this non-calculus dependent material could form the basis of an excellent free-standing AS level. Any takers?

Neil Bibby

Terms and concepts

Maths A = Z. Edited by P J F Horrell. Longman £3.95. 0 582 55588 4. Mathematical Formulae. By S Barnett and T M Cronin. Longman £3.95. 0 582 44758 5.

The foreword to the first of this pair of reference books states that it is a "guide to the many specialized terms used in modern mathematics" and that it "contains explanations of over 1,000 terms and concepts encountered in public examinations."

Both these phrases strike one as a little curious. Why select terms met in examinations, rather than those used in studying the subject? But, given this likely to contain the first word listed (which is abacus) or the names of Abel or Bombelli, or Henry Bragg (all in the first 14 pages)?

Again, the expression "modern mathematics" is normally associated with topics only relatively recently introduced to the school curriculum. The description "all sets and transfinite numbers" has been pitifully, if unkindly, applied. The particular terms are included, but so are many others which are traditional again. This

circumference, common factor, compasses (in pair of), concave, cone, congruent, converse, cosine and cube all appear, as do correspondingly simple expressions under most other letters of the alphabet.

Whether the brief elucidations under each heading are sufficient to satisfy the enquirer whose knowledge is so scanty as to require them to be open to doubt. In fact, the whole compilation seems to miss any probable target.

On the other side of the coin, however, the assemblage of mathematical formulae is triumphant. It is already an established success. Now in a fourth edition, it is substantially revised and enlarged. The compact, yet wide-ranging, presentation of reference material is exactly what is required by engineering and science students. Useful statistical tables have replaced the logarithmic tables found in former editions. All the earlier algebra and trigonometry, geometry and calculus remains, but with considerable additions. The whole retains its air of authoritative utility and is completely first-class.

F W Kellaway

EXTRA

Nesting

SMP 11-16, book B2. Cambridge University Press. £2.95. 0521 316380

This 124-page book is the second of the blue series of this course and is aimed at the intermediate level of ability. As with the yellow series (for the most able) and the green series, the text presupposes that the reader will have met the work contained in levels 1-4 of SMP. The syllabuses for the three series are "nested" in that the syllabus for the green series, which is essentially the Cockerell foundation list is included in that of the B series which in turn is included in that of the Y series.

The book is written for class use with its end points related to a common 16-plus assessment scheme currently being developed. Books in the blue series are designed to make provision for the late developer and this coupled with the syllabus nesting allows pupils to move up to another series while ensuring that the work already done is not wasted.

The text is clearly presented in a two-colour full-page format and includes excellent photographs and illustrations. The content offers a wide spread of mathematical activities, though I was disappointed to see that the use of a calculator was presented as a separate chapter and not integrated throughout. Likewise I would have preferred to have seen "investigations" integrated throughout and not separated out into two separate and distinct sections of work.

This text is an excellent addition to the SMP scheme and can be considered for pupils entering the scheme at 13-plus following the use of the planned transition books for those who have not worked through SMP levels 1-4.

Peter Connah

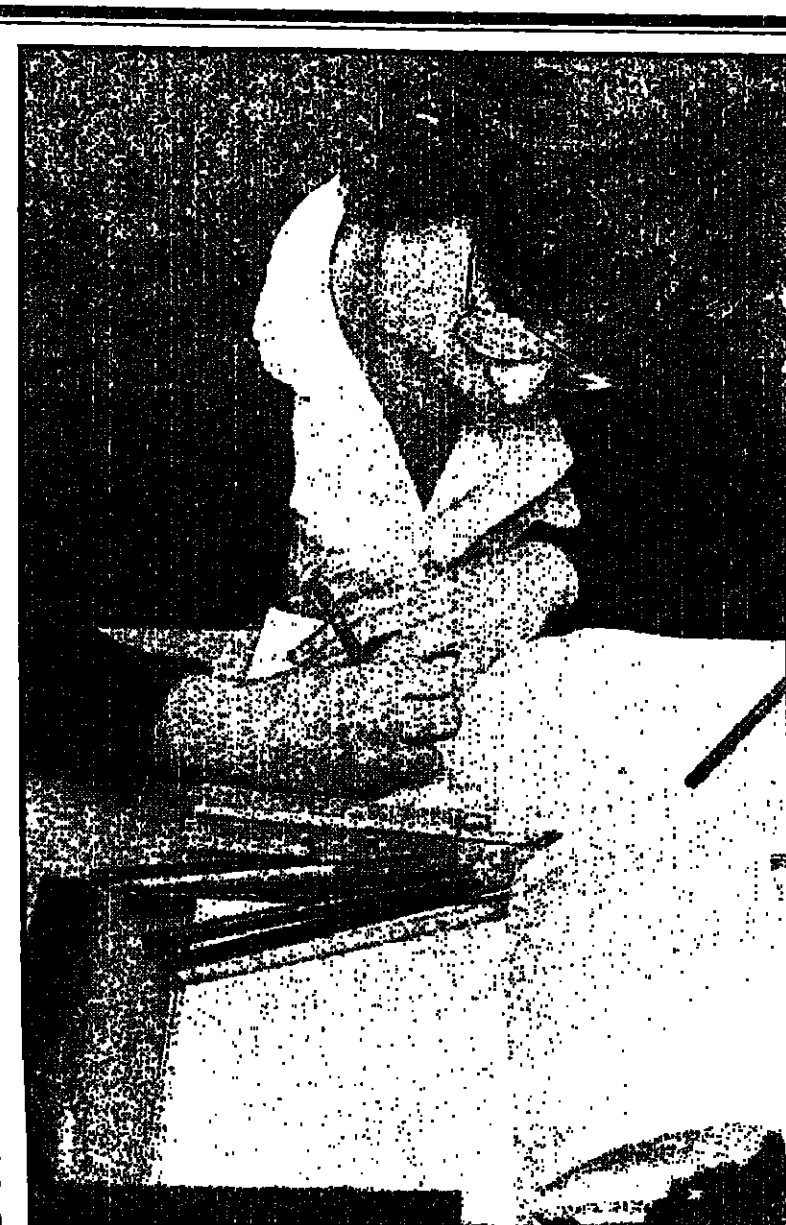


Photo: Sally & Robert Grant

The Open University

Mathematics Education Series

NEW

Devised and researched by the Open University's Centre for Mathematics Education. The Centre works closely with teachers and advisers to help develop effective teaching and learning.

First three Books out this year

Available now

Calculators in the Secondary School

Provides a discussion of the issues facing a teacher who is incorporating the calculator into her/his teaching, and a collection of classroom materials. These include 30 worksheet masters which may be photocopied. The book is a superb source of practical examples of calculator use.

Paperback £8.75

Available November 1986

Girls Into Mathematics

Developed in association with ILEA, brings together useful research on gender issues in mathematics, and suggests investigations and other activities that teachers can carry out with their classes and colleagues to help girls to achieve their potential.

Paperback about £6.00

Statistical Investigations in the Secondary School

Intended for teachers of pupils of the 11-16 age-group in mathematics and other subjects which use statistics, this book concentrates on graphical display of data as an aid to drawing conclusions. Accompanying software provides graphical tools to help with analysing data, estimation games and data files.

Book: Paperback about £5.75

Pack: (copy of book plus software and documentation) About £17.80 + VAT

Copies on approval:

Please send me copies of the following on 30 days approval:

0521 31126 8 ☐ Calculators in the Secondary School
0521 31084 6 ☐ Girls Into Mathematics
0521 31082 X ☐ Statistical Investigations in the Secondary School

Name

School

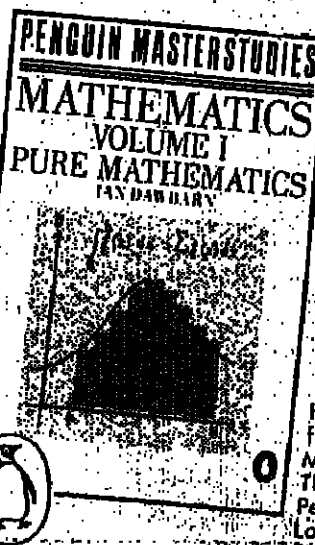
Address

Postcode

Return to: Inspection Copy Department, FREEPOST at the address below

CAMBRIDGE UNIVERSITY PRESS

The essential revision guide for Pure Mathematics 'A' level students!



- Covers examples and examination questions from major Examination Boards' syllabuses.
- Is intended for use on its own needs very little support material
- Can be used at any stage of the 'A' level course
- Order an inspection copy and see for yourself!

For an inspection copy of this book, or further information about Penguin's Mathematics titles please write to: The Educational Marketing Department, Penguin Books Ltd, 27 Wright's Lane, London W8 5TZ

Fresh offerings

Pure Mathematics Book 1. By J S Batt. Schofield and Sims £4.85. 0 7217 2356 X. Pure Mathematics. By T Bridgeman and G R Baldock. Longman £5.95. 0 582 29690 0. Pure Maths in Practice. By J Holderness. Cussey Press £6.50. 0 946183 22 8.

Whatever the eventual distillation from the ferment of examination reorganization, it appears that publishers expect continuing demand for books covering A level mathematics. Each of these three new arrivals has something fresh to offer, and each (especially when used in class with a competent teacher) should be of great assistance to potential candidates.

Mrs Batt states that her pair of books (the second part is promised soon) provide a "reasonably straight-

forward text" covering the Joint Matriculation Board's syllabus for Pure Mathematics 1. This, of course, includes the generally accepted common core, so that the books should suffice for virtually all the requirements of other Boards.

The text may be straightforward, and could indeed be regarded as conventional in content and approach. The quality of the implicit teaching, and the efficient presentation of examples, exercises and solutions, represent a much above average product.

It is interesting that an author's note includes an acknowledgement of help from Dr Baldock, who was associated with Miss Batt in compilations of questions from past papers. For Dr Baldock is co-author of a volume in the series of Longman's exam guides.

These guides encourage study, direct application towards the most effective routes to examination success and provide an armoury of precau-

tions against... pitfalls and errors. In the case of mathematics, the process is largely one of association of a brief recapitulation of key facts with a multitude of worked examples. The examples are partly illustrative of the principles involved in each section, and partly selections from past papers together with very full solutions and, often, a helpful commentary. A chapter on examination techniques contains much good sense.

The third book also makes a sensible approach to the subject. Once again the common core topics are fully dealt with. There are other sections on complex numbers, differential equations and coordinate geometry, which suffices to complete JMB, AEB and Southern Board requirements.

Interspersed between the chapters of standard work (very brief notes on lists of formulae or rules rather than derivations or lengthy expositions) are the many exercises are pages of advice to candidates. How to plan one's work, to gain confidence, to memorize essential facts, and to cope in the examination room, are typical themes.

F W Kellaway

EXTRA

Evaluating mathematical learning



Making tracks

DAVID PLAYFOOT

Friday morning in a classroom of 10-year-olds; time for some peace and quiet; time for the maths test.

"Put down numbers one to ten. I shall say each question twice so don't worry if you miss it the first time! Remember, if you get them all right, you get a star on the chart - so try hard and concentrate!"

One method of evaluating maths. I saw another at a friend's house recently; she was marking a set of examination papers as part of the assessment of some 12-year-old middle school children and the ticks and crosses were flying fast and furious.

"Do the results tell you much you don't know?" I asked.

"Not really," she said. "What this type of marking does is to make the assumption that the written symbol, often perceived as the final product of the child's thinking, will enable the teacher to make some meaningful evaluation of mathematical understanding. For some time now I've had some real doubts about the effectiveness of such methods to do that."

The two examples above are, of course, at the most formal end of the evaluative continuum but they represent much of what passes for assessment in maths in both primary and secondary schools. We work in these ways for a number of reasons, some good and some not so good.

First, they are a way of testing children's knowledge; if a child successfully solves an equation we can assume she has mastered the skill inherent in that operation. Second, they can confirm or deny our own professional judgement of our pupils. Third, such methods of testing do give us a relatively quiet period on a Friday morning when we need it!

More interesting is the thinking behind these approaches. The way in which teachers evaluate children's progress inevitably reflects their view of the manner in which maths is learnt; from the forms of assessment frequent-

ly used at present it would seem that we accept the notion of maths as a series of discrete elements which build one upon another. Almost all published maths material follows this model; the schemes are designed in a hierarchical way, each card or textbook assuming skills and concepts covered in previous books or cards. To give a practical example, a child acquires the skill of multiplying numbers with three digits by 10 and then moves on to the next step of multiplying numbers with three digits by multiples of 10. Such a pattern obviously helps teachers to organize their work in the classroom but it infers there is only one way in which children can make progress through mathematics. It suggests also that the standard procedures or algorithms defined by maths schemes and/or textbooks are the only acceptable methods of revealing understanding or tackling problems.

I recently came across a notion that challenges this view of maths learning, one which I found articulated and synthesized a number of ideas and methods which had been at the centre of discussions with colleagues over a considerable period; it has been summarized as "making tracks". It suggests that when children learn the concepts and skills of mathematics they do so not in discrete units but through a process of laying down tracks of understanding which are occasionally laid successfully but which are often laid badly. These tracks remain in the minds of children and often unexplored or unknown by teachers who use conventional evaluation techniques.

I find this image extremely useful in explaining some of the more haphazard ways I have observed when working with children on maths problem-solving. For example, it is clear that some children who are very successful in their maths seem to have made great jumps in their thinking; in fact, they have laid a track in a way that has not followed the traditional pattern or the scheme sequence; they changed rails at a set of points back down the line somewhere and I missed it!

The key question is "How does one recognize the tracks being laid down in order that some sort of meaningful intervention can take place?" Certainly the idea of recognizing the tracks from such things as homework, tables tests or written examinations is a non-starter; the very individual nature of

the track laying makes any blanket approach inappropriate.

As so often in education I find the genesis of the answer in the infant classroom; unhindered by the nagging obsession to have a written product the infant teacher frequently discusses with her pupils the processes she has observed. This is an evaluative tool of immense value to teachers at whatever stage of education; of course, it needs structure and in pedagogic terms it requires an organization that recognizes the value of the group. The other vital element is our old friend "practical apparatus"; it does strike me as bizarre that the Cockcroft message concerning the importance of practical work is everywhere accepted but in so many schools is still only hot air in the staffroom.

The danger here is that teachers of older children (and I include those teaching sixth formers) fail to see that, even when children are working with symbolic representation, discursive evaluation is the key way to recognizing the tracks. The infant teacher's role is in the process by which children arrive at their answers which give us the crucial clues as to their thinking and it is only by observing them and talking with them as they work that we can help them lay tracks which lead in the right direction.

Interestingly enough the new GCSE examination will have elements of practical and discussion work in it and only recently *The TES* reported on tentative proposals for changes at A level which would include a discursive input. Maybe the rumble of the train is coming from the secondary terminal instead of the infant and junior stations. Either way it's a welcome sound!

David Playfoot, is headteacher, Uplands Middle School, Sudbury, Suffolk.

NAMA: Initiatives

DAVID KENT

The National Association of Mathematics Advisers (NAMA) came into being during the year 1974. For this we can thank the pioneer work of a few people, but in particular Stewart Friis, who for many years subsequently oversaw the Association from his position as secretary/treasurer.

As an Association with membership restricted to those holding posts as i.e.a. advisers or inspectors, NAMA will never be numerically large. But given that its members are the people responsible for the formation and implementation of i.e.a. policies on mathematics education, it is one of some considerable potential and influence.

At present there are many issues facing mathematics education. It is difficult to put these in any order of priority or importance, although it is true to say that matters relating to the implementation of GCSE are the most urgent. No matter how urgent or important the issue, it is certain that NAMA will be involved in some way or other.

NAMA brings together advisers and inspectors from all over the country. Its fundamental aim is to seek ways of improving the quality of the mathematical experience offered to pupils.

The main focal point for the working of the Association is the annual conference, usually held in early to mid March at the Abbey Hotel, Malvern. It is here that members meet to formulate the Association's practices and policies through members' contributions, policy workshops, working groups and the AGM. For the 1987 conference the working groups will be focusing attention on Profiling, Micros and Mathematics. Implications of GCSE for continuity in Mathematics 14-19, Primary Issues and the very topical New Inset Procedures.

With GCSE being so much in the forefront of everyone's mind, NAMA have built the 1987 conference around the theme of Assessment. A number of speakers, who may be advisers, lecturers or practising teachers, will make contributions on a range of topics. These will include Assessment at both secondary and primary level, resourcing for GCSE and oral and practical assessment.

For many people mathematics is about doing sums and assessing it is about getting them right or wrong. To remind us that there is far more to our subject than this narrow view, the scene will be set by a philosophical introduction on the nature of mathematics from John Mason of the Open University. His contribution will be supplemented by a workshop organized by John Dodridge (Cheshire i.e.a.). There will also be the usual exhibition of books, software and

other resources.

The theme of the conference and the content of the working groups often define some of the current concerns and directions of work for the Association. In recent years the working groups have focused attention on such matters as Alternative Forms of Assessment at 16-plus, the shortage of mathematics teachers, mathematics and pre-vocational courses, micro-computers, ESQ advisory teachers and National Criteria. When appropriate the views of the working group and those of the Association are made known to the appropriate bodies.

Responding to DES and other initiatives is another area of NAMA work. Recent responses have included a view of Advisory Services, NAMA Criteria, the *Mathematics from 5-16* document and Attainment Targets and Assessment in Mathematics in Primary Schools. We are also currently preparing our response to the paper on the shortage of teachers in our subject.

We would like to think that there are occasions when our response to various initiatives has helped to make people aware of possible changes. Recently, for instance, there has been a good deal said on attainment targets in primary mathematics. Statements such as: "by the age of 11 children should" may be well intended, but they can be counter productive. At best they tend to encourage rote learning and at worst they can force teachers to offer inappropriate work to pupils.

Another area of work for the Association is to serve on the various committees engaged in the field of mathematics education. Currently these include Joint Mathematics Council, Standing Conference of Associated Schools, Standing Conference of Mathematics Education in Schools, SEC Mathematics Committee and the Consultative group on Mathematical Education. And of course, first through Alan MacIntosh and then Peter Reynolds, NAMA was represented on the Cockcroft Committee.

Affiliated to the main Association are a number of regional groups. These regular meetings provide a forum for ideas and discussion on local issues, some cases the regional groups develop shared in-service courses which cut across i.e.a. boundaries, thus providing teachers with an additional experience.

Since its inception, NAMA has grown considerably. We hope that this short article adequately describes our current position. We hope also to keep all educationists informed about developments within NAMA. Any enquiries about the Association should be made to our secretary Alan Hanley, Inspectorate Branch, Education Dept., Northampton House, Northampton NN1 2HX.

All girls System

Girls Into Maths Can Go. Edited by L. Burton. Holt, Rinehart and Winston. £5.95. 0 03 910687 X.

This book, "conceived as support to an in-service pack entitled *Girls Into Maths*, which has been jointly developed by the Inner London Education Authority and the Open University" is heavily documented.

Yet the very extent of the writings shows what a problem the subject has become for a great many girls. Whether the cause is genuinely one of sex differences, or of attitudes and pre-conceived notions, or of the varying career expectations of boys and girls, constitutes just one aspect of the debate.

Even the sex discrimination act gets an airing in one contribution to this review of research, prejudice and possibilities. The act takes its place in the index alongside sex-stereotyping, an item which recurs in many of the papers. One conclusion is that given appropriate motivation, girls can do well at mathematics. In other words, they can if they want to.

Mathematics In Action Book 1. Mathematics In Action Group. Blackie and Chambers £4.50.

This is the first book of a series of eight books, teachers books, answer books and related assessment materials designed to cover the content of the GCSE and Scottish Standard Grade syllabuses. The aim of the course is to offer teachers a clearly organized system while at the same time providing interesting, relevant and exciting mathematics for pupils of all abilities.

The book is well presented in a full-page format using two colours and incorporates numerous illustrations and diagrams throughout. The language used is refreshingly informal and lively which will encourage pupils to become involved in the investigations, practice and problem-solving.

The text attempts to take full account of the philosophy and recommendations of the Cockcroft Report and the Scottish Joint Working Party Report by assuming the use of calculators throughout and by integration of investigations, puzzles and brain-teasers wherever relevant.

Classified Advertisements
Index to Appointments vacant, Wanted and other classifications

Appointments vacant

Nursery Education

Other Appointments 51

Primary Education

Headships 51

Deputy Headships Senior

Masters/Mistresses 53

Heads of Department 53

Scale 2 Posts 53

Remedial and Special Needs

Teaching Posts 56

Scale 1 Posts 54

Middle School Education

Headships 56

Deputy Headships Senior

Masters/Mistresses 56

Remedial and Special Needs

Teaching Posts 56

Art and Design 56

Craft Design & Technology 56

English 56

Modern Languages 56

Music 56

Science 57

Other than by Subjects 57

Secondary Education

Headships 57

Deputy Headships Senior

Masters/Mistresses 57

Remedial and Special Needs

Teaching Posts 57

Art and Design 58

Careers 58

Commercial Subjects 58

Computer Studies 58

Craft Design & Technology 59

Economics & Business Studies 59

English 60

Geography 60

History 61

Home Economics 61

Humanities 62

Mathematics 62

Modern Languages 63

Music 64

Pastoral 64

Physical Education 64

Religious Education 65

Rural Science 65

Science 65

Social Studies 66

Speech and Drama 66

Technology 67

Other than by Subjects 67

Sixth Form and Tertiary Colleges

Scale 2 Posts 67

Scale 1 Posts 67

Special Education

Headships 67

Deputy Headships Senior

Masters/Mistresses 67

Heads of Department 67

Scale 2 Posts 68

Scale 1 Posts 68

Colleges of Further Education

Heads of Department 74

Other Appointments 74

Independent Schools

Headships 70

Deputy Headships Senior

Masters/Mistresses 70

Remedial and Special Needs

Teaching Posts 70

Art and Design 70

Computer Studies 70

Craft Design & Technology 70

Economics & Business Studies 70

English 70

Geography 71

History 71

Mathematics 71

Modern Languages 71

Music 71

Pastoral 72

Physical Education 72

Religious Education 72

Science 72

Speech and Drama 72

Technology 72

Other than by Subjects 73

Colleges of Higher Education

Heads of Department 77

Other Appointments 77

Preparatory Schools

Headships 73

Deputy Headships Senior

Masters/Mistresses 73

Remedial and Special Needs

Teaching Posts 73

Geography 73

History 73

Mathematics 73

Modern Languages 73

Music 74

Physical Education 74

Other than by Subjects 74

Youth and Community Service

Heads of Department 74

Other Appointments 74

Colleges and Departments of Art

Other Appointments 76

Polytechnics

Other Appointments 78

Research Posts

79

Service Colleges

77

Colleges of Higher Education

Heads of Department 77

Other Appointments 77

Adult Education

79

Community Homes and Associated Institutes

Other Appointments 79

Assessment Centres

78

Youth and Community Service

79

Overseas Appointments

81

Administration

Local Education Authority 80

Administrative General

81

Educational Psychologists

83

Examiners

83

Miscellaneous

84

Outdoor Education

85

English as a Foreign Language

85

English as a Second Language

85

Appointments Wanted

85

Educational Courses

85

Tuition

86

Awards and Scholarships

86

Personal Announcements

86

For Sale and Wanted

86

Holidays and Accommodation

86

Home Exchange Holidays

86

Field Study Centres

86

Business Opportunities

86

Properties for Sale and Wanted

86

Please address classified advertisements to:

John Ladbroke, The Advertisement Manager,

The Times Educational Supplement, Priory House,

St. John's Lane, London EC1M 4BX.

Classified Advertisements Rates:

Single Column £2.25 per line (min. 3 lines).

Classified Display £12.90 per s.c. (min. 8.5cm x 2 cols £245.10).

Box number facility £5.00.

All rates are exclusive of V.A.T.

Copy deadline (space permitting) Monday preceding Friday of publication.

Corrections deadline 10.30am Tuesday preceding Friday of publication.

Cancellation deadline 4.30pm Monday preceding Friday of publication.

All advertisements are published subject to the Terms and Conditions of Times Newspapers Ltd. (available on request).

EDUCATION DEPARTMENT
WEST KENT AREA

HEADTEACHERS

Hadlow County Primary School - Group 4 - Summer 1987 Roll Approx. 230

Required for April 1987, a Head Teacher, for this successful and established Group 4 Primary School serving a large village on the outskirts of Tonbridge.

Tunbridge Wells, Sherwood Park County Primary School - Group 5 - Roll Approx. 300

Required for April 1987, or sooner if possible, a Head Teacher for this Group 5 Primary School being formed by the amalgamation of the Sherwood Park Infant and Junior Schools, to provide an enthusiastic and inspiring lead for this exciting development. This is a re-advertisement, previous applicants will automatically be reconsidered.

Frittenden C.E. (Controlled) Primary School - Group 1 - Roll Approx. 65

Required for April 1987 or sooner if possible, a Head Teacher for this Church Controlled Group 1 Primary School serving a small Wealden Village.

Application forms and further details of all three posts from the Area Education Officer (ref P75D), 39 Grove Hill Road, Tunbridge Wells, Kent, TN1 1SL (s.a.e. please) to whom they should be returned by the 31 October, 1986.

(02785)

KENT COUNTY COUNCIL

MUSICAL TABLES

MULTIPLICATION TO MUSIC £4.95

Now you can give your child the chance to learn the multiplication tables in a fun and easy way. This book is designed to help children learn the multiplication tables in a fun and easy way. It contains 100 multiplication tables, each with a corresponding musical note. Children can learn the tables by listening to the music and then playing the notes on a keyboard or other musical instrument.

100 multiplication tables, each with a corresponding musical note.

Learn the tables by listening to the music and then playing the notes on a keyboard or other musical instrument.

Send your cheque today for only £4.95

to: Musical Tables, 100 High Street, London, E1 1AA

or: 100 High Street, London, E1 1AA

LEICESTERSHIRE
COUNTY COUNCIL

County Council
An Equal Opportunity
Employer
GROBY COMMUNITY
COLLEGE
Rathbone Road, Groby,
Leicestershire LE6 0FF
(14-18)
NO1: 816
HEAD OF PHYSICS
SCALE: 3
In January 1987 teacher
like charge of post 16 Ph
ics and to become a mem
ber of the large facu
m. Mode 3 integrat
ence GCSE is taught to
students in the 5 and 6
years and Nuffield A level
physics at post 16.

Please contact the Hon. **ROBERT B. BACH** for further details and application for **SAE**. (35226) 1348

AFFORDSHIRE
HEEN ELIZABETH
AMERICAN SCHOOL
 1151 Road, Tamworth,
 Staff.
 Offered for January 1
BOARD OF PHYSICS (Sci-
 ted) a strong depart-
 ment the Science Faculty.
 Interest in modular co-
 urse will be helpful.
 Application forms ob-
 tainable from and returnable
 to Headteacher (i.e.a.o.).
 Conveying will discuss
 Give names/addresses

Scale 2 Posts and above

EDFORDSHIRE
EDUCATION SERVICE
ARLINGTON UPPER
SCHOOL
Newell End Road, Harlin
Tel: Toddington 4250.
Required for January 1991
experienced Physics to
scale two, to teach Phys
'A' Level in this well

1. *Chlorophyll a* (Chl *a*)

ST FELIX SCHOOL, SOUTHWOLD Head

The Governors invite applications for this post which will become vacant on the retirement of Mrs Anne Mustoe. The successful applicant will take up the appointment in April or September 1987.

St Felix is an Independent Boarding and Day School. There are 360 girls in the Senior School of whom 315 are boarders and over 100 are in the Sixth Form. The Preparatory School, St George's, is adjacent.

The School is non-denominational. It has a strong academic tradition and great importance is attached to career development and extra-curricular activities.

A car and an attractive house is provided.

Please apply for further details to the Chairman of the Governors 36 Morpeth Mansions Morpeth Terrace London SW1P 1ET Tel. 01-828 9691.

The closing date for applications will be 3 November.

(04725)



WAKEFIELD GIRLS' HIGH SCHOOL APPOINTMENT OF HEAD

Applications are invited for the appointment of Head commencing 1st September 1987.

The post becomes vacant upon the retirement of Miss Y J Hand.

The School is an Independent Day School of 860 pupils including a Junior School of 170 aged 4-11 years.

At present 30 places a year are awarded under the Assisted Places Scheme.

Further particulars are available from:-

The Clerk to the Governors
Governors' Office, PO Box 25
11 Market Street
Wakefield
West Yorkshire, WF1 1DD

Closing date for applications 24th October 1986.

(0204)

THE KING'S SCHOOL, TYNEMOUTH (A School of the Woodard Corporation founded 1880)

HEAD

The Northern Chapter of the Woodard Corporation invites applications from well experienced graduates who are practising communicants of the Church of England, for the above post from April or September 1987.

The School is an Independent Senior Day School for 900 boys incorporating a Junior School and Kindergarten. Girls are admitted to the Sixth Form. A house attached to the School is provided.

Full details of the School and form of application are available from the undersigned, to whom completed applications should be forwarded, together with a curriculum vitae and the names of three referees, before 17th October 1986.

1 Prudhoe Terrace,
Tynemouth.
North Tyneside, NE30 4EZ. Telephone 091-257 6786

L. Knox,
Divisional Bursar,
Tynemouth.

SPECIAL EDUCATION

OXFORDSHIRE COUNTY COUNCIL
Required for January 1987, a teacher of the Hearing Impaired to work as a member of a team of four with primary and secondary pupils. Initially Scale 2 (15) with a possible Scale 2 (16) for a well experienced person. Apply by letter and C.V. to the Education Officer, C.P. School, Queensway, Chesham, Bucks HP8 4JG. Closing date 17th October 1986. S.A.S. please. (0494) 160022

SEFTON METROPOLITAN BOROUGH OF SEFTON
NEWFIELD SCHOOL, Edge Lane, Crosby, Liverpool L15 4TG.
The following posts are available on this mixed all-ages Special School for children with emotional and behavioural difficulties.
Required in January 1987, or earlier:
(1) GENERAL CLASS TEACHER (S) to take responsibility for a small group of children, age range 10-13.
(2) SPECIALIST TEACHER OF LOGIC CRAFTS (S) to teach on a withdrawal basis over the whole range.
(3) TEMPORARY PART-TIME TEACHER (Scale 15) until April 1987 in the first instance - five or six weeks. Duties initially to teach on a withdrawal basis and then to assist the full-time teacher. Applicants should state special experience of Special Education in not essential. All intending applicants are welcome to visit the school and meet the Headmaster. Please apply to the Headmaster, 931 3050 to ask for an appointment. (0547) 160022

SEFTON METROPOLITAN BOROUGH OF SEFTON
NEWFIELD SCHOOL, Edge Lane, Crosby, Liverpool L15 4TG.
Required for January 1987, an enthusiastic and committed CLASS TEACHER (Scale 15) to teach on a withdrawal basis over the whole range. Applicants should state special experience of Special Education in not essential. All intending applicants are welcome to visit the school and meet the Headmaster. Please apply to the Headmaster, 931 3050 to ask for an appointment. (0547) 160022

SUFFOLK COUNTY COUNCIL
HILLBURY SPECIAL SCHOOL, Sudbury (Age Range 3-19:50 on roll)
Required for January 1987, a teacher, Scale 2 (plus 8.5), to teach on a withdrawal basis over the whole range. An enthusiastic person is sought to become involved in a wide range of activities. Relevant experience would be an advantage. Further details and application form from the Headmaster at the school (S.A.S. please) to whom applications should be sent by 17th October 1986.
The Area Education Officer, Suffolk County Council, Edmunds 1933, 2AN (0338) 160022

SUFFOLK COUNTY COUNCIL
BELLESTAD SPECIAL SCHOOL, Ipswich IP3 5ND
11-19, Roll 105
Required January 1987, a teacher, Scale 2 (plus 8.5), to teach on a withdrawal basis over the whole range. An enthusiastic person is sought to become involved in a wide range of activities. Relevant experience would be an advantage. Further details and application form from the Headmaster at the school (S.A.S. please) to whom applications should be sent by 17th October 1986.
The Area Education Officer, Suffolk County Council, Edmunds 1933, 2AN (0338) 160022

SUFFOLK COUNTY COUNCIL
BELLESTAD SPECIAL SCHOOL, Ipswich IP3 5ND
11-19, Roll 105
Required January 1987, a teacher, Scale 2 (plus 8.5), to teach on a withdrawal basis over the whole range. An enthusiastic person is sought to become involved in a wide range of activities. Relevant experience would be an advantage. Further details and application form from the Headmaster at the school (S.A.S. please) to whom applications should be sent by 17th October 1986.
The Area Education Officer, Suffolk County Council, Edmunds 1933, 2AN (0338) 160022

SUFFOLK COUNTY COUNCIL
BELLESTAD SPECIAL SCHOOL, Ipswich IP3 5ND
11-19, Roll 105
Required January 1987, a teacher, Scale 2 (plus 8.5), to teach on a withdrawal basis over the whole range. An enthusiastic person is sought to become involved in a wide range of activities. Relevant experience would be an advantage. Further details and application form from the Headmaster at the school (S.A.S. please) to whom applications should be sent by 17th October 1986.
The Area Education Officer, Suffolk County Council, Edmunds 1933, 2AN (0338) 160022

SUFFOLK COUNTY COUNCIL
BELLESTAD SPECIAL SCHOOL, Ipswich IP3 5ND
11-19, Roll 105
Required January 1987, a teacher, Scale 2 (plus 8.5), to teach on a withdrawal basis over the whole range. An enthusiastic person is sought to become involved in a wide range of activities. Relevant experience would be an advantage. Further details and application form from the Headmaster at the school (S.A.S. please) to whom applications should be sent by 17th October 1986.
The Area Education Officer, Suffolk County Council, Edmunds 1933, 2AN (0338) 160022

SUFFOLK COUNTY COUNCIL
BELLESTAD SPECIAL SCHOOL, Ipswich IP3 5ND
11-19, Roll 105
Required January 1987, a teacher, Scale 2 (plus 8.5), to teach on a withdrawal basis over the whole range. An enthusiastic person is sought to become involved in a wide range of activities. Relevant experience would be an advantage. Further details and application form from the Headmaster at the school (S.A.S. please) to whom applications should be sent by 17th October 1986.
The Area Education Officer, Suffolk County Council, Edmunds 1933, 2AN (0338) 160022

SUFFOLK COUNTY COUNCIL
BELLESTAD SPECIAL SCHOOL, Ipswich IP3 5ND
11-19, Roll 105
Required January 1987, a teacher, Scale 2 (plus 8.5), to teach on a withdrawal basis over the whole range. An enthusiastic person is sought to become involved in a wide range of activities. Relevant experience would be an advantage. Further details and application form from the Headmaster at the school (S.A.S. please) to whom applications should be sent by 17th October 1986.
The Area Education Officer, Suffolk County Council, Edmunds 1933, 2AN (0338) 160022

SUFFOLK COUNTY COUNCIL
BELLESTAD SPECIAL SCHOOL, Ipswich IP3 5ND
11-19, Roll 105
Required January 1987, a teacher, Scale 2 (plus 8.5), to teach on a withdrawal basis over the whole range. An enthusiastic person is sought to become involved in a wide range of activities. Relevant experience would be an advantage. Further details and application form from the Headmaster at the school (S.A.S. please) to whom applications should be sent by 17th October 1986.
The Area Education Officer, Suffolk County Council, Edmunds 1933, 2AN (0338) 160022

SUFFOLK COUNTY COUNCIL
BELLESTAD SPECIAL SCHOOL, Ipswich IP3 5ND
11-19, Roll 105
Required January 1987, a teacher, Scale 2 (plus 8.5), to teach on a withdrawal basis over the whole range. An enthusiastic person is sought to become involved in a wide range of activities. Relevant experience would be an advantage. Further details and application form from the Headmaster at the school (S.A.S. please) to whom applications should be sent by 17th October 1986.
The Area Education Officer, Suffolk County Council, Edmunds 1933, 2AN (0338) 160022

WARWICKSHIRE

BLITTON SCHOOL
Pocklington Lane, Colehill, Birmingham B46 3JE
Required for January or April 1987 a teacher (Scale 15) for the Further Education Department. This is a team teaching situation offering education to 16-19 year olds with learning difficulties. Skills in Counselling, English, Maths and PE are particularly valuable. Flexible commitment to the extra-curricular needs of the students is also essential.
Application form and job description available from the Acting Headteacher, Mr J. Fothergill. Closing date two weeks from appearance of this advert.
Warwickshire is an equal opportunities employer. (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

Economics & Business Studies

Heads of Department

SURREY
KING EDWARD'S SCHOOL
Witley
HMC (conventional), boarding, Asiatel Place, 500 pupils (11-18)
Required for January 1987, a teacher in accordance with experience and qualifications. Married or single accommodation available. An exciting challenge for a lively, unpretentious graduate.
Full details from Headmaster to whom applications should be sent by October 1986. (0335) 182418

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

WILTSHIRE
EXETER HOUSE SPECIAL
Friary Lane, Salisbury SP1 2HA
N.O.R. 51
Required for January 1987 a teacher, Scale 1 Class Teacher.
Written letter of application stating age, giving previous experience of education and also the names and addresses of two referees to be sent to the Head Teacher by the 17th October 1986.
AN EQUAL OPPORTUNITY EMPLOYER. 160022 (0527) 160022

Other Assistants

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

BEDFORDSHIRE
BEDFORD SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

INDEPENDENT EDUCATION

LONDON N15
ST. ANTHONY'S SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

LONDON N15
ST. ANTHONY'S SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road, Bedford MK43 0JL. Closing date 17th October 1986. (0527) 182418

LONDON N15
ST. ANTHONY'S SCHOOL
Leighton Road, Bedford MK43 0JL
Required for September 1987, two graduates to teach English and Mathematics. The successful candidates will be responsible for the day-to-day running of the school. They will be expected to take a full part in the life of the school. Salary Scale 15-18. Applications should be sent to the Headmaster, Bedford School, Leighton Road,

PREPARATORY SCHOOLS

SHROPSHIRE

WACKWOOD HAUGH
Huxton XI Towns,
Shrewsbury, Shrop.
Required January 1987.
Apply in writing with C.V. and names of two referees to the Headmaster, Wackwood Haugh, Huxton XI Towns, Shrewsbury, Shrop. (33300) 205624

Music

Other Assistants

LONDON NW1

Required for January a qualified and experienced teacher of music to take charge of the music department and teach class music throughout the school. Salary according to qualifications and experience on the London Burnham Scale. Apply with Curriculum Vitae and names of two referees to: The Headmaster, North Bridge House School, 14 Gloucester Gate, London NW1 4HG. (33335) 205624

LONDON NW6

ST PAUL'S GIRLS' PREPARATORY SCHOOL
Required for January 1987, part-time qualified and experienced teacher of the Violin, willing to teach with orchestra and chamber music groups as well as individual lessons to pupils aged 6 years. Please apply in writing with full curriculum vitae and names, addresses and telephone numbers of three referees to: The Headmistress, Bute House, Ladbroke Grove, London W2 7EA. (33456) 183824

Physical Education

Heads of Department

BUCKINGHAMSHIRE

THE BEACON
Chesham Bois, Aylesham, Bucks
(I.A.P.S. Day school numbering 300 boys)
Required for January 1987, HEAD OF P.E. Single accommodation available. Burnham plus. Apply with full C.V. and names, addresses and telephone numbers of two referees to the Headmaster. (33275) 204218

Other than by Subject

Classification

Heads of Department

ABERDEENSHIRE

BLAIRMORE SCHOOL
Glasgow, Highland
(I.A.P.S. Co-ed. 7+ to 13+)
Required for January 1987, HEAD OF P.E. Single accommodation available. Burnham plus. Apply with full C.V. and names, addresses and telephone numbers of two referees to: The Headmaster, Blairmore School, Blairmore, Aberdeen. (33458) 205616

ARCHDIOCESE OF WESTMINSTER

ST ALBAN'S PREPARATORY SCHOOL
Woodside Lane, North Finchley, N18
Required for January 1987, HEAD OF THE PRE-PREP. DEPARTMENT. SCALES. APRIL 1987

We require an experienced teacher to take charge of our Pre-Preparatory Department. This is a full-time day preparatory school. Roman Catholic preparation. Please apply in writing with C.V. to the HEADMASTER by 10th November 1986. (33599) 205618

Other Assistants

BUCKINGHAMSHIRE

BEACONFIELD
LAPS 10 boys
Required for January 1987, a qualified and experienced part-time teacher for five year-olds. Burnham Scale Only. Permanent Superannuation. Not resident. Apply in writing with full C.V. and references to Headmaster. (33279) 205624

HAMPSHIRE

DUNNIE
(Headmaster's School)
Petersfield Hampshire
Required for January 1987, a qualified and experienced teacher, able to take Music and Art. Apply in writing with full details and names and addresses of two referees to: Headmistress, Dunnie, Petersfield, Hampshire GU32 4DP. (Closing date: Monday October 13th.) 205624 (33540)

HAMPSHIRE

FAIRLEIGH SCHOOL
Red Rye, Andover, Hants.
Required, preferably January, qualified teacher for one of two Reception Classes (7-8 year olds) in this expanding school. Enthusiasm and a willingness to play a full part in the activities of a flourishing school essential. Burnham Scale. Accommodation available. Apply with CV and names of two referees to the Headmaster. (33569) 205624

HAMPSHIRE

MARSH COURT
Stockbridge, Hampshire
(I.A.P.S. 95 boys 45 girls)
Required for January 1987, a qualified and experienced teacher to teach 7-8 year olds who occupy about 2/3 of the teaching time, but not essential. Burnham Scale 1 + LW + 88A. Please apply in writing with full details and names and addresses of two referees to: The Headmistress, Marsh Court, Stockbridge, Hampshire RG26 3JL. (33456) 183824

LONDON SW7

Wanted for January 1987 an experienced and enthusiastic teacher for four and five year olds. Please apply in writing with curriculum vitae and names and addresses of two referees to: Mr. A.G. Bray, The Hampstead School, 14 Gloucester Gate, London NW1 4HG. (33599) 205624

HEREFORD & WORCESTER

Required for September, 1987, General Subjects Teacher for ages 7-11 in rural Catholic Preparatory School. The successful candidate will be required to teach English, Maths, Science, History, Geography, Art, Music, and Physical Education. Must be a married couple with a minimum of 10 years' experience. Please apply with C.V. and references to: Headmaster, St. Richard's School, Hereford. (33719) 205624

HERTFORDSHIRE

DUNCOMBE SCHOOL
4 Warren Park Road, Hemel Hempstead, Herts. SG9 6JL
(I.A.P.S. Day School co-ed. 4-11 years)
Required for January or Easter 1987, a qualified teacher to teach general subjects to assist with boys' games and assist with general subjects to assist with boys' games and assist with general subjects to assist with boys' games. Burnham Scale 1. Superannuation and London allowance. Applications with C.V. and names and addresses of two referees to: Miss R. Mott, Duncombe School, Hemel Hempstead, Herts. SG9 6JL. (33409) 205624

HERTFORDSHIRE

BASEDASERS' ASKE'S SCHOOL FOR GIRLS
Aldenham, Herts. SG8 5BT
Required for January 1987, a qualified teacher to teach 100 girls, including 50 (5-10 years) in the Preparatory Department. Required for two terms from January 1987 for the remainder of the academic year, a well qualified teacher for a class of 30 year olds. Burnham Scale 1. General London Allowance. Please apply in writing with full details and names of two referees to: Headmaster, Basedasers' Aske's School, Aldenham, Herts. SG8 5BT. (33409) 205624

LONDON NW1

Required for January a fully qualified teacher to take charge of a class of 30 year olds in this co-ed. preparatory school. Salary according to London Burnham Scale. Apply with Curriculum Vitae and names of two referees to: The Headmaster, North Bridge House School, 14 Gloucester Gate, London NW1 4HG. (33335) 205624

LONDON NW6

ST PAUL'S GIRLS' PREPARATORY SCHOOL
Huxton XI Towns, Shrewsbury, Shrop.
Required for January 1987, a qualified and experienced teacher, able to take Music and Art. Apply in writing with full details and names and addresses of two referees to: Headmistress, Dunnie, Petersfield, Hampshire GU32 4DP. (Closing date: Monday October 13th.) 205624 (33540)

LONDON SE

BLAISE HILL HIGH SCHOOL
Blaise Hill, Bristol
Required for January 1987, experienced infant teacher for newly formed Reception Class. Burnham Scale and Inner London Allowance. Applications in writing, together with C.V. and names and addresses of two referees to: The Headmistress, Blaize Hill, Bristol. (33540) 205624

LONDON SW1

Fully qualified teacher for small class of 4-5 year olds. Enthusiasm and a willingness to play a full part in the activities of a flourishing school essential. Burnham Scale. Accommodation available. Apply with CV and names of two referees to the Headmaster. (33569) 205624

LONDON SW7

Fairley House is a full-time day school for boys and girls with average and above intelligence. Between the ages of 5 and 13 who have specific learning difficulties. Required for January 1987, a qualified teacher for 7-9 year olds. Specific remedial qualifications, helpful, but not essential. Burnham Scale 1 + LW + 88A. Please apply in writing with full details and names and addresses of two referees to: The Headmistress, Fairley House, 22 Princes Gate, London SW7 2PT. (33569) 205624

LONDON SW7

Wanted for January 1987 an experienced and enthusiastic teacher for four and five year olds. Please apply in writing with curriculum vitae and names and addresses of two referees to: Mr. A.G. Bray, The Hampstead School, 14 Gloucester Gate, London NW1 4HG. (33599) 205624

LONDON SW7

Wanted for January 1987 an experienced and enthusiastic teacher for four and five year olds. Please apply in writing with curriculum vitae and names and addresses of two referees to: Mr. A.G. Bray, The Hampstead School, 14 Gloucester Gate, London NW1 4HG. (33599) 205624

LONDON

Wanted for January 1987, a qualified and experienced teacher for ages 7-11 in rural Catholic Preparatory School. The successful candidate will be required to teach English, Maths, Science, History, Geography, Art, Music, and Physical Education. Must be a married couple with a minimum of 10 years' experience. Please apply with C.V. and references to: Headmaster, St. Richard's School, Hereford. (33719) 205624

LONDON

WETHERBY SCHOOL
11 Pembroke Square, Ws
Required immediately, Assistant Teacher. Applications with C.V. and names, addresses and telephone numbers of two referees to: The Headmistress, Wetherby School, 11 Pembroke Square, Ws. (33540) 205624

MIDDLESEX

TWICKENHAM PREPARATORY SCHOOL
(I.A.P.S. Co-ed. 4-11 years)
Required for January 1987, a qualified teacher to teach 100 girls, including 50 (5-10 years) in the Preparatory Department. Required for two terms from January 1987 for the remainder of the academic year, a well qualified teacher for a class of 30 year olds. Burnham Scale 1. General London Allowance. Please apply in writing with full details and names of two referees to: Headmaster, Twickenham Preparatory School, Twickenham, Middlesex. (33409) 205624

MIDDLESEX

ST HELEN'S SCHOOL
Northwood, Middlesex
Two class teachers required full time for January 1987 one of whom should be qualified for the school library. Please apply in writing with full details and names of two referees to: Headmaster, St. Helen's School, Northwood, Middlesex. (33409) 205624

OXFORDSHIRE

ST EUGEN'S SCHOOL
Carnwell Manor, Farnham, Surrey
(I.A.P.S. Boarding Day Co-ed. Enthusiastic, qualified teacher to teach 100 girls, including 50 (5-10 years) in the Preparatory Department. Must be a married couple with a minimum of 10 years' experience. Please apply with C.V. and references to: Headmaster, St. Eugen's School, Carnwell Manor, Farnham, Surrey. (33409) 205624

OXFORDSHIRE

ST EUGEN'S SCHOOL
Carnwell Manor, Farnham, Surrey
(I.A.P.S. Boarding Day Co-ed. Enthusiastic, qualified teacher to teach 100 girls, including 50 (5-10 years) in the Preparatory Department. Must be a married couple with a minimum of 10 years' experience. Please apply with C.V. and references to: Headmaster, St. Eugen's School, Carnwell Manor, Farnham, Surrey. (33409) 205624

OXFORDSHIRE

ST EUGEN'S SCHOOL
Carnwell Manor, Farnham, Surrey
(I.A.P.S. Boarding Day Co-ed. Enthusiastic, qualified teacher to teach 100 girls, including 50 (5-10 years) in the Preparatory Department. Must be a married couple with a minimum of 10 years' experience. Please apply with C.V. and references to: Headmaster, St. Eugen's School, Carnwell Manor, Farnham, Surrey. (33409) 205624

PRESTON

ST PIVS PREPARATORY SCHOOL
Pulford, Preston
Appointment of INFANT TEACHER - SCALE 1
The Governors invite applications from suitably qualified candidates for the above position to be taken up as soon as possible. This is an independent day school of approximately 100 pupils for boys and girls from 4 to 11 years, and there is also a nursery class of around 20 pupils. Please apply in writing, including the names and addresses of two referees to: The Secretary, C.P.S. (Preston) Limited, 6 Starke Street, Preston PR1 3LU. Closing date for applications is 21st October 1986. (33545) 205624

PRESTON

ST PIVS PREPARATORY SCHOOL
Pulford, Preston
Appointment of INFANT TEACHER - SCALE 1
The Governors invite applications from suitably qualified candidates for the above position to be taken up as soon as possible. This is an independent day school of approximately 100 pupils for boys and girls from 4 to 11 years, and there is also a nursery class of around 20 pupils. Please apply in writing, including the names and addresses of two referees to: The Secretary, C.P.S. (Preston) Limited, 6 Starke Street, Preston PR1 3LU. Closing date for applications is 21st October 1986. (33545) 205624

PRESTON

ST PIVS PREPARATORY SCHOOL
Pulford, Preston
Appointment of INFANT TEACHER - SCALE 1
The Governors invite applications from suitably qualified candidates for the above position to be taken up as soon as possible. This is an independent day school of approximately 100 pupils for boys and girls from 4 to 11 years, and there is also a nursery class of around 20 pupils. Please apply in writing, including the names and addresses of two referees to: The Secretary, C.P.S. (Preston) Limited, 6 Starke Street, Preston PR1 3LU. Closing date for applications is 21st October 1986. (33545) 205624

PRESTON

ST PIVS PREPARATORY SCHOOL
Pulford, Preston
Appointment of INFANT TEACHER - SCALE 1
The Governors invite applications from suitably qualified candidates for the above position to be taken up as soon as possible. This is an independent day school of approximately 100 pupils for boys and girls from 4 to 11 years, and there is also a nursery class of around 20 pupils. Please apply in writing, including the names and addresses of two referees to: The Secretary, C.P.S. (Preston) Limited, 6 Starke Street, Preston PR1 3LU. Closing date for applications is 21st October 1986. (33545) 205624

PRESTON

ST PIVS PREPARATORY SCHOOL
Pulford, Preston
Appointment of INFANT TEACHER - SCALE 1
The Governors invite applications from suitably qualified candidates for the above position to be taken up as soon as possible. This is an independent day school of approximately 100 pupils for boys and girls from 4 to 11 years, and there is also a nursery class of around 20 pupils. Please apply in writing, including the names and addresses of two referees to: The Secretary, C.P.S. (Preston) Limited, 6 Starke Street, Preston PR1 3LU. Closing date for applications is 21st October 1986. (33545) 205624

PRESTON

ST PIVS PREPARATORY SCHOOL
Pulford, Preston
Appointment of INFANT TEACHER - SCALE 1
The Governors invite applications from suitably qualified candidates for the above position to be taken up as soon as possible. This is an independent day school of approximately 100 pupils for boys and girls from 4 to 11 years, and there is also a nursery class of around 20 pupils. Please apply in writing, including the names and addresses of two referees to: The Secretary, C.P.S. (Preston) Limited, 6 Starke Street, Preston PR1 3LU. Closing date for applications is 21st October 1986. (33545) 205624

PRESTON

ST PIVS PREPARATORY SCHOOL
Pulford, Preston
Appointment of INFANT TEACHER - SCALE 1
The Governors invite applications from suitably qualified candidates for the above position to be taken up as soon as possible. This is an independent day school of approximately 100 pupils for boys and girls from 4 to 11 years, and there is also a nursery class of around 20 pupils. Please apply in writing, including the names and addresses of two referees to: The Secretary, C.P.S. (Preston) Limited, 6 Starke Street, Preston PR1 3LU. Closing date for applications is 21st October 1986. (33545) 205624

PRESTON

ST PIVS PREPARATORY SCHOOL
Pulford, Preston
Appointment of INFANT TEACHER - SCALE 1
The Governors invite applications from suitably qualified candidates for the above position to be taken up as soon as possible. This is an independent day school of approximately 100 pupils for boys and girls from 4 to 11 years, and there is also a nursery class of around 20 pupils. Please apply in writing, including the names and addresses of two referees to: The Secretary, C.P.S. (Preston) Limited, 6 Starke Street, Preston PR1 3LU. Closing date for applications is 21st October 1986. (33545) 205624

PRESTON

ST PIVS PREPARATORY SCHOOL
Pulford, Preston
Appointment of INFANT TEACHER - SCALE 1
The Governors invite applications from suitably qualified candidates for the above position to be taken up as soon as possible. This is an independent day school of approximately 100 pupils for boys and girls from 4 to 11 years, and there is also a nursery class of around 20 pupils. Please apply in writing, including the names and addresses of two referees to: The Secretary, C.P.S. (Preston) Limited, 6 Starke Street, Preston PR1 3LU. Closing date for applications is 21st October 1986. (33545) 205624

PRESTON

ST PIVS PREPARATORY SCHOOL
Pulford, Preston
Appointment of INFANT TEACHER - SCALE 1
The Governors invite applications from suitably qualified candidates for the above position to be taken up as soon as possible. This is an independent day school of approximately 100 pupils for boys and girls from 4 to 11 years, and there is also a nursery class of around 20 pupils. Please apply in writing, including the names and addresses of two referees to: The Secretary, C.P.S. (Preston) Limited, 6 Starke Street, Preston PR1 3LU. Closing date for applications is 21st October 1986. (33545) 205624

PRESTON

ST PIVS PREPARATORY SCHOOL
Pulford, Preston
Appointment of INFANT TEACHER - SCALE 1
The Governors invite applications from suitably qualified candidates for the above position to be taken up as soon as possible. This is an independent day school of approximately 100 pupils for boys and girls from 4 to 11 years, and there is also a nursery class of around 20 pupils. Please apply in writing, including the names and addresses of two referees to: The Secretary, C.P.S. (Preston) Limited, 6 Starke Street, Preston PR1 3LU. Closing date for applications is 21st October 1986. (33545) 205624

PRESTON

ST PIVS PREPARATORY SCHOOL
Pulford, Preston
Appointment of INFANT TEACHER - SCALE 1
The Governors invite applications from suitably qualified candidates for the above position to be taken up as soon as possible. This is an independent day school of approximately 100 pupils for boys and girls from 4 to 11 years, and there is also a nursery class of around 20 pupils. Please apply in writing, including the names and addresses of two referees to: The Secretary, C.P.S. (Preston) Limited, 6 Starke Street, Preston PR1 3LU. Closing date for applications is 21st October 1986. (33545) 205624

PRESTON

ST PIVS PREPARATORY SCHOOL
Pulford, Preston
Appointment of INFANT TEACHER - SCALE 1
The Governors invite applications from suitably qualified candidates for the above position to be taken up as soon as possible. This is an independent day school of approximately 100 pupils for boys and girls from 4 to 11 years, and there is also a nursery class of around 20 pupils. Please apply in writing, including the names and addresses of two referees to: The Secretary, C.P.S. (Preston) Limited, 6 Starke Street, Preston PR1 3LU. Closing date for applications is 21st October 1986. (33545) 205624

AVON COUNTY EDUCATION SERVICE

BRUNEL TECHNICAL COLLEGE
Uxbridge, Middlesex
DEPARTMENT OF CONSTRUCTION AND LAND ADMINISTRATION
Applications invited for the post of Lecturer in Construction and Land Administration to commence as soon as possible. To take responsibility for the teaching of Construction and Land Administration to students on the BTEC National Certificate and Diploma programmes. Laboratory and workshop control of the Head of School of Construction Studies. This is an important senior appointment and in addition to suitable professional and academic qualifications, the candidate will be expected to have a proven record of administrative ability, previous teaching at an appropriate level is essential. The ability to offer other subjects would be an advantage. Further details and application forms to be returned by 21st October, 1986, to: The Principal, Brunel Technical College, Uxbridge, Middlesex. (33545) 205624

AVON COUNTY EDUCATION SERVICE

BRUNEL TECHNICAL COLLEGE
Uxbridge, Middlesex
DEPARTMENT OF CONSTRUCTION AND LAND ADMINISTRATION
Applications invited for the post of Lecturer in Construction and Land Administration to commence as soon as possible. To take responsibility for the teaching of Construction and Land Administration to students on the BTEC National Certificate and Diploma programmes. Laboratory and workshop control of the Head of School of Construction Studies. This is an important senior appointment and in addition to suitable professional and academic qualifications, the candidate will be expected to have a proven record of administrative ability, previous teaching at an appropriate level is essential. The ability to offer other subjects would be an advantage. Further details and application forms to be returned by 21st October, 1986, to: The Principal, Brunel Technical College, Uxbridge, Middlesex. (33545) 205624

AVON COUNTY EDUCATION SERVICE

BRUNEL TECHNICAL COLLEGE
Uxbridge, Middlesex
DEPARTMENT OF CONSTRUCTION AND LAND ADMINISTRATION
Applications invited for the post of Lecturer in Construction and Land Administration to commence as soon as possible. To take responsibility for the teaching of Construction and Land Administration to students on the BTEC National Certificate and Diploma programmes. Laboratory and workshop control of the Head of School of Construction Studies. This is an important senior appointment and in addition to suitable professional and academic qualifications, the candidate will be expected to have a proven record of administrative ability, previous teaching at an appropriate level is essential. The ability to offer other subjects would be an advantage. Further details and application forms to be returned by 21st October, 1986, to: The Principal, Brunel Technical College, Uxbridge, Middlesex. (33545) 205624

AVON COUNTY EDUCATION SERVICE

BRUNEL TECHNICAL COLLEGE
Uxbridge, Middlesex
DEPARTMENT OF CONSTRUCTION AND LAND ADMINISTRATION
Applications invited for the post of Lecturer in Construction and Land Administration to commence as soon as possible. To take responsibility for the teaching of Construction and Land Administration to students on the BTEC National Certificate and Diploma programmes. Laboratory and workshop control of the Head of School of Construction Studies. This is an important senior appointment and in addition to suitable professional and academic qualifications, the candidate will be expected to have a proven record of administrative ability, previous teaching at an appropriate level is essential. The ability to offer other subjects would be an advantage. Further details and application forms to be returned by 21st October, 1986, to: The Principal, Brunel Technical College, Uxbridge, Middlesex. (33545) 205624

AVON COUNTY EDUCATION SERVICE

BRUNEL TECHNICAL COLLEGE
Uxbridge, Middlesex
DEPARTMENT OF CONSTRUCTION AND LAND ADMINISTRATION
Applications invited for the post of Lecturer in Construction and Land Administration to commence as soon as possible. To take responsibility for the teaching of Construction and Land Administration to students on the BTEC National Certificate and Diploma programmes. Laboratory and workshop control of the Head of School of Construction Studies. This is an important senior appointment and in addition to suitable professional and academic qualifications, the candidate will be expected to have a proven record of administrative ability, previous teaching at an appropriate level is essential. The ability to offer other subjects would be an advantage. Further details and application forms to be returned by 21st October, 1986, to: The Principal, Brunel Technical College, Uxbridge, Middlesex. (33545) 205624

AVON COUNTY EDUCATION SERVICE

BRUNEL TECHNICAL COLLEGE
Uxbridge, Middlesex
DEPARTMENT OF CONSTRUCTION AND LAND ADMINISTRATION
Applications invited for the post of Lecturer in Construction and Land Administration to commence as soon as possible. To take responsibility for the teaching of Construction and Land Administration to students on the BTEC National Certificate and Diploma programmes. Laboratory and workshop control of the Head of School of Construction Studies. This is an important senior appointment and in addition to suitable professional and academic qualifications, the candidate will be expected to have a proven record of administrative ability, previous teaching at an appropriate level is essential. The ability to offer other subjects would be an advantage. Further details and application forms to be returned by 21st October, 1986, to: The Principal, Brunel Technical College, Uxbridge, Middlesex. (33545) 205624

AVON COUNTY EDUCATION SERVICE

BRUNEL TECHNICAL COLLEGE
Uxbridge, Middlesex
DEPARTMENT OF CONSTRUCTION AND LAND ADMINISTRATION
Applications invited for the post of Lecturer in Construction and Land Administration to commence as soon as possible. To take responsibility for the teaching of Construction and Land Administration to students on the BTEC National Certificate and Diploma programmes. Laboratory and workshop control of the Head of School of Construction Studies. This is an important senior appointment and in addition to suitable professional and academic qualifications, the candidate will be expected to have a proven record of administrative ability, previous teaching at an appropriate level is essential. The ability to offer other subjects would be an advantage. Further details and application forms to be returned by 21st October, 1986, to: The Principal, Brunel Technical College, Uxbridge, Middlesex. (33545) 205624

AVON COUNTY EDUCATION SERVICE

BRUNEL TECHNICAL COLLEGE
Uxbridge, Middlesex
DEPARTMENT OF CONSTRUCTION AND LAND ADMINISTRATION
Applications invited for the post of Lecturer in Construction and Land Administration to commence as soon as possible. To take responsibility for the teaching of Construction and Land Administration to students on the BTEC National Certificate and Diploma programmes. Laboratory and workshop control of the Head of School of Construction Studies. This is an important senior appointment and in addition to suitable professional and academic qualifications, the candidate will be expected to have a proven record of administrative ability, previous teaching at an appropriate level is essential. The ability to offer other subjects would be an advantage. Further details and application forms to be returned by 21st October, 1986, to: The Principal, Brunel Technical College, Uxbridge, Middlesex. (33545) 205624

AVON COUNTY EDUCATION SERVICE

BRUNEL TECHNICAL COLLEGE
Uxbridge, Middlesex
DEPARTMENT OF CONSTRUCTION AND LAND ADMINISTRATION
Applications invited for the post of Lecturer in Construction and Land Administration to commence as soon as possible. To take responsibility for the teaching of Construction and Land Administration to students on the BTEC National Certificate and Diploma programmes. Laboratory and workshop control of the Head of School of Construction Studies. This is an important senior appointment and in addition to suitable professional and academic qualifications, the candidate will be expected to have a proven record of administrative ability, previous teaching at an appropriate level is essential. The ability to offer other subjects would be an advantage. Further details and application forms to be returned by 21st October, 1986, to: The Principal, Brunel Technical College, Uxbridge, Middlesex. (33545) 205624

AVON COUNTY EDUCATION SERVICE

BRUNEL TECHNICAL COLLEGE
Uxbridge, Middlesex
DEPARTMENT OF CONSTRUCTION AND LAND ADMINISTRATION
Applications invited for the post of Lecturer in Construction and Land Administration to commence as soon as possible. To take responsibility for the teaching of Construction and Land Administration to students on the BTEC National Certificate and Diploma programmes. Laboratory and workshop control of the Head of School of Construction Studies. This is an important senior appointment and in addition to suitable professional and academic qualifications, the candidate will be expected to have a proven record of administrative ability, previous teaching at an appropriate level is essential. The ability to offer other subjects would be an advantage. Further details and application forms to be returned by 21st October, 1986, to: The Principal, Brunel Technical College, Uxbridge, Middlesex. (33545) 205624

AVON COUNTY EDUCATION SERVICE

BRUNEL TECHNICAL COLLEGE
Uxbridge, Middlesex
DEPARTMENT OF CONSTRUCTION AND LAND ADMINISTRATION
Applications invited for the post of Lecturer in Construction and Land Administration to commence as soon as possible. To take responsibility for the teaching of Construction and Land Administration to students on the BTEC National Certificate and Diploma programmes. Laboratory and workshop control of the Head of School of Construction Studies. This is an important senior appointment and in addition to suitable professional and academic qualifications, the candidate will be expected to have a proven record of administrative ability, previous teaching at an appropriate level is essential. The ability to offer other subjects would be an advantage. Further details and application forms to be returned by 21st October, 1986, to: The Principal, Brunel Technical College, Uxbridge, Middlesex. (33545) 205624

AVON COUNTY EDUCATION SERVICE

BRUNEL TECHNICAL COLLEGE
Uxbridge, Middlesex
DEPARTMENT OF CONSTRUCTION AND LAND ADMINISTRATION
Applications invited for the post of Lecturer in Construction and Land Administration to commence as soon as possible. To take responsibility for the teaching of Construction and Land Administration to students on the BTEC National Certificate and Diploma programmes. Laboratory and workshop control of the Head of School of Construction Studies. This is an important senior appointment and in addition to suitable professional and academic qualifications, the candidate will be expected to have a proven record of administrative ability, previous teaching at an appropriate level is essential. The ability to offer other subjects would be an advantage. Further details and application forms to be returned by 21st October, 1986, to: The Principal, Brunel Technical College, Uxbridge, Middlesex. (33545) 205624

AVON COUNTY EDUCATION SERVICE

BUCKINGHAMSHIRE COLLEGE

SCHOOL OF ENGINEERING

Lecturer Senior Lecturer in Electronics/Computing

Applications are invited for the above post of Lecturer/Senior Lecturer in Electronics/Computing in the School of Engineering. The post offers the opportunity to contribute to the School's developing and expanding range of work in the new technologies which includes BTEC National and Higher National programmes in Electronics, Information Technology, Business Information Technology and a Post graduate Diploma in Real-time software engineering.

Candidates should possess a good honours degree, preferably with a post graduate qualification and/or relevant work experience. Experience of digital and analogue circuit design work would be advantageous.

Salary Scale:
Lecturer £6,843 - £13,656
Senior Lecturer £12,615 - £15,873

Application forms and further details can be obtained from:-

Deputy Director,
Buckinghamshire College
of Higher Education,
Queen Alexandra Road,
High Wycombe, Bucks HP11 2JZ

(2726)

COLLEGES OF HIGHER EDUCATION

continued

KENT COUNTY COUNCIL

CANTERBURY CHRIST CHURCH COLLEGE

LECTURER/ADVISER IN MULTICULTURAL EDUCATION

This post has been established jointly by the Kent County Council and Christ Church College of Higher Education. The person appointed will be based at the College and will be responsible for the provision of advisory services and resources to teachers in local authority schools and colleges, and with teaching on undergraduate, initial teacher training and in-service courses offered by the College.

The appointment will take effect from 1 January 1987. Salary: £13,656 - £15,873 p.a. For further details, write to the Principal's Secretary, Christ Church College, North Holmes Road, Canterbury, Kent CT1 1JH. Closing date: 20 October 1986. (13984) 340026

LANCASTER

S. MARTIN'S COLLEGE OF HIGHER EDUCATION

LECTURERSHIP IN PRIMARY EDUCATION

RE

Applications are invited from suitably qualified teachers for the above post from January 1987 or as soon as possible thereafter. Applicants should have recent, successful experience in Primary schools, and will be required to offer RELIGIOUS EDUCATION as a major curriculum strength and also to contribute to one or more of the following areas: multicultural education, the use of computers in the classroom, management, child development. Good experience within the 4-8 range especially welcome.

The post will be rated at Lecturer II or Senior Lecturer according to qualifications and experience.

Further particulars and application forms may be obtained from The Principal, S. Martin's College, Lancaster. Applications should be returned by 31 October 1986.

For further details contact the Head-teacher for further details and application forms (S.A.E.). (139930) 490000

Polytechnics

Other Appointments

SUNDERLAND

SUNDERLAND POLYTECHNIC

FACULTY OF EDUCATION

LECTURER/INSENIOR LECTURER IN PRIMARY EDUCATION

Salary: £11,656 - £12,615 p.a. For further details, write to the Principal's Secretary, Sunderland Polytechnic, Langham Tower, Ryhope Road, Sunderland, Tyne and Wear, NE1 6BB. Closing date: 24 October 1986. (139801) 260026

Assessment Centres

LEICESTERSHIRE COUNTY COUNCIL

An Equal Opportunity Employer

CHERRY LEAS ASSESSMENT CENTRE

Wootton Drive, Leicester

NOR: 30

SCALE 2 SCA

Required for January 1987 a teacher to work 30 hours per week (3-7 years) within a Special Needs Unit and 30% Language Outreach Scheme in local infant school.

Please contact the Head-teacher for further details and application forms (S.A.E.). (139930) 490000

North Riding College, Scarborough

Lecturer II/Senior Lecturer (3 Posts)

Curriculum Studies - 1 Post. Education & Professional Studies - 2 Posts

LI/SL: £8,595-£15,873 depending on experience

The College is concerned principally with Primary Education and seeks to make these appointments from January 87.

Further particulars and application forms, returnable 21/10/86, from the Principal (Appointments), North Riding College, Pile Road, Scarborough, North Yorkshire YO11 3AZ. Tel: Scarborough (0723) 382382.

NORTH YORKSHIRE COUNTY COUNCIL

Athrofa Gogledd-dd Cymru The North E Wales Institute of higher education

CONNAH'S QUAY, DEESIDE, CLWYD

SCHOOL OF ENGINEERING

SENIOR LECTURER IN COMPUTER AIDED ENGINEERING SYSTEMS

£12,615 - £14,820 (bar) - £15,873

Candidates should be graduate Engineers with experience in the use of Computers in Planning, Manufacture and Production Control. Current experience of Engineering Design would be advantageous. The person appointed will become part of a team developing an expanding area of activity for which excellent CAE facilities are already in use. Further details and application form available from the Senior Registrar, The North East Wales Institute, Connaah's Quay, Deeside, Clwyd, Tel: Deeside 817831 Ext. 254. Closing date for receipt of applications 24th October 1986.

COLLEGE OF ART, DESIGN AND TECHNOLOGY, REGENT STREET, WREXHAM, CLWYD

LECTURER I IN 3D DESIGN

£8,543 - £11,885

Applications are invited for the post of Lecturer I in 3D Design, to teach primarily at B/TEC Diploma level.

Applications are invited for the post of Lecturer I in Architectural Stained Glass to teach at both B/TEC Diploma and Higher Diploma levels.

LECTURER I IN FASHION/CLOTHING TECHNOLOGY

Applications are invited for the post of lecturer I in Fashion and Clothing Technology to teach B/TEC, College Diplomas and City and Guilds students.

Teaching and/or relevant professional and industrial experience would be considered an advantage. All posts to commence as soon as possible.

Further information and application form available from the Deputy Registrar, College of Art, Design & Technology, Regent Street, Wrexham, Clwyd. Tel: Wrexham 365955. Closing date for receipt of applications: 24th October 1986.

Y dyddiad olaf i ddychwyd ffurfienni cais yw dydd lau, Hydref 23, 1986.

RESEARCH POSTS

SEFYDLIAD CENEDLAETHOL ER HYRWYDDO YMCHWIL I ADDYSG YN LLOEGR A CHYMRU



Swyddog Ymchwil

Gwahoddiir celsladau am ddwy swydd o Swyddog Ymchwil i weithio fel aelodau o dim ymchwil yn Adran Gymraeg y SCYA.

Bydd un swyddog yn gweithio ar gynllun Darparu deunydd ar gyfer dysgwyr araf mewn ysgolion uwchradd dwyieithog am gynnod o ddwy flynedd. (Swydd WM01).

Bydd y swyddog arall yn paratol Deunydd i athrawon a hyfforddiant mewn swydd yn y fwyddyn gynat, ac yn gweithio ym maes Dysgu Ygriffennu yn yr ail fwyddyn. (Swydd WM01).

Gofynnir am radd neu arbenigedd yn y Gymraeg a phroffid o ddysgu ar gyfer y ddwy swydd. Byddai'n fanteisiol, hefyd, pe bai gan yr ymgydd broffid mewn un neu ragor o'r meysydd canlynol: addysg adferol a chyfrifaduron (Swydd WM01) gwaith gygyddol ac asau llafradd (Swydd WM01).

Dylai ymgyddwyr fod yn barod i deithio ac i aros addysgfa'r gan to angen. Ddwyieithol ldynt weithio yn Abertawe neu mewn cysylltied agos i'r swyddfa yno.

Parhad y swyddi: 0 Ionawr 1, 1987 i Ragfyr 31, 1988. Cyflog: £9,000 - £11,275 (y raddfa'n cael ei hadolygu).

Caiff ffurfienni cais a manylion pellach gan y Dr. E. Price, Swyddfa'r SCYA, Adran Addysg, Coleg y Brifysgol, Hendrefollan, Abertawe, SA2 7NB. Ffôn (0782) 201231.

Y dyddiad olaf i ddychwyd ffurfienni cais yw dydd lau, Hydref 23, 1986.

(02714)

RSA

wishes to appoint a

PROJECT OFFICER

To develop a qualification for those working with advanced office technology. This project is being funded by RSA and RANK XEROX

The appointment will be full-time for one year from January 1st 1987. Secondment may be negotiated. The salary will be approximately at Senior Lecturer level. The Project Officer will work from the RSA's London office.

For application form, please contact James Richardson, RSA, 8 John Adam Street, London WC2N 6EZ. Tel: 01-930 5115, Ext. 229.

RSA is an Equal Opportunities Employer.

(02528)

FELLOWSHIPS

LIVERPOOL POLYTECHNIC

COMPUTER EDUCATION DEPARTMENT

SCHOOL TEACHER FELLOWSHIPS IN EDUCATIONAL COMPUTING

For the Spring Term 1987 to work on an agreed aspect of educational computing.

The Teacher Fellow will be expected to produce either an evaluation report or well-documented teaching materials suitable for use in the classroom or as an aid to teacher training.

Applicants should be qualified teachers with at least five years teaching experience, and be engaged in some aspect of educational computing.

Further details available from the Computer Education Centre, Liverpool Polytechnic, 70 Mount Pleasant, Liverpool, LA 6 3JX. Tel No. 051-207 3561 ext 253.

Letters of application with the names and addresses of two referees to arrive no later than 21st October, 1986.

(04000)

Adult Education

CALDERDALE

METROPOLITAN BOROUGH COUNCIL

EDUCATION DEPARTMENT

ADULT EDUCATION

DEVELOPMENT TUTOR

(General Interest Class Programme)

£12,942 Grade 1 (£6,554 - £12,942)

Post Ref No. ED/254

Applicants are invited from local two years experience in general adult education for the above post to commence 1st January 1987 or as soon as possible thereafter.

In addition to weekly teaching load, the post holder will be able to use their own specialism/subject area to develop new areas of work and evaluate the effectiveness of selected sectors of the general interest class programme in the Upper Calder Valley.

Previous applicants will automatically be re-considered.

Further details and application forms are available upon receipt of a s.a.e. from the Chief Education Officer, Education Department, P.O. Box 3, Norman House, Northgate, Halifax HX1 1UN. Closing date: Friday 24th October 1986.

The Council is committed to be an equal opportunities employer and service provider. Applications are invited from women and men from all sections of the community, irrespective of ethnic origin, disability, sexual orientation or marital status who have the necessary attributes for the post. (135593) 380000

Youth and Community Service

CAMBRIDGESHIRE

YOUTH OPPORTUNITY EMPLOYMENT

YOUTH ADVISER

Required as soon as possible. Senior Community Education Tutor - Burnham P.E. Lecturer II in developing and implementing programmes for INSET, team supervisors for staff and others.

Applicants should have a minimum of two years experience in the above post to commence 1st January 1987 or as soon as possible thereafter.

This is a newly created post funded under Section 11 and forms part of the Authority's provision to implement its multi-cultural Education and Multi-cultural Education.

Possible housing assistance. Further details and an application form available from the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

DEVON

COUNTY COUNCIL

YOUTH OPPORTUNITY EMPLOYMENT

Required as soon as possible. Senior Community Education Tutor - Burnham P.E. Lecturer II in developing and implementing programmes for INSET, team supervisors for staff and others.

Applicants should have a minimum of two years experience in the above post to commence 1st January 1987 or as soon as possible thereafter.

This is a newly created post funded under Section 11 and forms part of the Authority's provision to implement its multi-cultural Education and Multi-cultural Education.

Possible housing assistance. Further details and an application form available from the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

For further details and application forms, please contact the Senior Area Education Officer, Education Office, Central House, City Road, Peterborough PE1 1UJ. Closing date: 24th October (135593) 440000

SOCIAL SERVICES DEPARTMENT

Teacher, Kidlington

Salary: Burnham Scale 1 - £6,423 - £10,533 per annum

plus Community Home Addition of £1206 p.a.

Thornbury House is an observation and assessment centre for 30 adolescent boys, situated in the Moors, Kidlington. Applicants for this challenging and interesting post must hold a teaching qualification and have experience in teaching general subjects.

This is a re-advertisement and previous applicants need not apply.

For informal discussion contact Mr C Blanchard, Head of Home, telephone Kidlington 3153.

Applications and job description from Director of Social Services, 27 Park End Street, Oxford. Telephone Oxford 815732.

Closing date: 22.10.86.

(02713)

Oxfordshire County Council

AN EQUAL OPPORTUNITY EMPLOYER

Leisure Services/Youth & Community

Detached Youth & Community Development Workers (2 posts)

(Project Pehchan)

£9,309-£10,401 p.a.

Nottinghamshire County Council together with the Asian Sub-continent Voluntary Youth Group (an umbrella organisation) have collaborated in setting up this Detached Youth Work Project to work in identifying and devising initiatives to meet the growing needs of Asian young people. The Project currently requires two suitably qualified Female Workers, who are able to speak at least one Asian language, one to

